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FOR

MOUNTED RIFLE VOLUNTEERS

OR

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PREFACE.

THE system of drill pursued in the 1st Hampshire Mounted Rifle Volunteers, having met with the approval of Government, I have compiled this Manual for the use of other Volunteer corps of the same arm.

When, in the winter of 1859, I was asked to assist in forming a corps of Mounted Volunteers, to be composed of hunting men, I thought the project well worth trying.

I had seen both in India and in Russia enough of irregular cavalry of various descriptions, to lead me to the opinion that something in that way might be devised to suit volunteers. By the term "irregular" I mean some simple equipment and easy movements whereby intelligent men could be brought to do good service with much less drill than is necessary in regular cavalry.

In Lieut.-Col. James Conolly, an experienced cavalry officer, who happened to be on the staff at Portsmouth, I found a valuable counsellor, but his removal to Canada deprived me of his assistance in carrying out details. I found, however, some useful suggestions in his two memoranda, dated 13th January and 7th February 1860, "on the "modifications rendered necessary in our cavalry drill by "the improvement in fire arms."

By the time our corps was formed and had gone through a little foot drill, we were furnished with Colonel Lyson's book of instructions for "Mounted Rifle Volunteers" in which I found all that I wanted to enable me to begin drills on horseback, and which book forms the ground-work of my system,—an obligation I have to acknowledge.

For dismounted drills, and musketry instruction, Colonel Lysons makes references to certain parts of his Drill Book for Rifle Volunteers, which necessitates the possession of

two books, an inconvenience which Parts I. to IV. of this Manual are intended to remedy.

How to carry a rifle on horseback in quick movements across country, was a difficulty most opportunely surmounted by my happening to meet a gentleman (Mr. Charles Miller of Froyle) who carried his gun in a leathern bag attached to his saddle. He told me he was in the habit of riding long distances with this appendage, and had had many falls without injury to man, horse, or gun; and he referred me to Galton's "Art of Travel" for this simple solution of the problem.

"Sew a bag of canvas, leather, or hide of such bigness as to admit the butt end of the gun freely. The straps which support it buckle through a ring in the pommel of the saddle, and the thongs by which the slope is adjusted fasten round the girth below.

"The exact adjustment may not be hit upon by an unpractised person for some little time, but when they are once ascertained the straps need never be shifted. The gun is perfectly safe, and never comes below the arm-pit even in taking a drop leap."*

I at once adopted the plan, and after due trial and report, I was requested by the then Secretary of State for War, the late Lord Herbert, to prepare the drill which forms Part VII. under the head of the Namaqua Bucket, in reference to the Tribe in South Africa from whom Mr. Galton derived the idea.

The great powers and daily improving qualities of firearms suggested to me the necessity of some wider scope of evolutions than mere skirmishing as dismounted infantry. I thought our equestrian powers susceptible of development more in keeping with the range of our rifles, and this idea I have endeavoured to carry out by extending on horseback in the manner laid down in Part VIII.

---

* Mr. Galton's "Art of Travel," page 188.

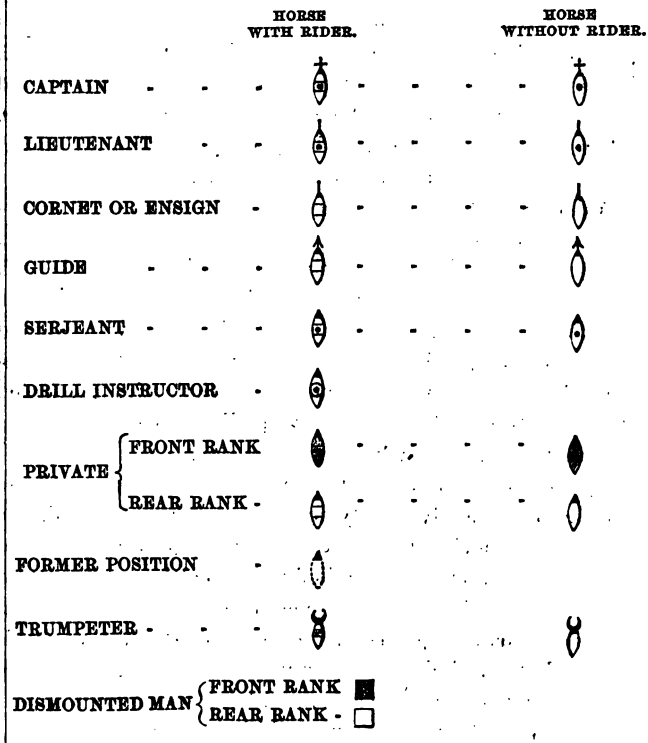
The fear of swelling this Manual beyond due limits deterred me from touching upon outpost and escort duties. Indeed I should be at a loss to frame any special instructions in these duties which would be precisely applicable to Volunteers; but Col. White, the officer who, at the request of the Secretary of State, was deputed by His Royal Highness the Field Marshal Commanding in Chief to see my drill tested at our last inspection, having recommended that this omission should be supplied, I have in the Appendix introduced some extracts from the Queen's Regulations, and referred to portions of the Cavalry Regulations of 1859, wherein Officers of Mounted Volunteers will find the authorized instructions for the Army on the subjects.

Volunteer officers are of course expected to make themselves sufficiently acquainted with the books of instruction used in the army to enable them to work in brigade with regular troops. But every mounted Volunteer should bear in mind the possible contingency of his services being wanted to drill, and perhaps to lead his uninstructed neighbours in an emergency, an honourable distinction for which the contents of this Manual will qualify any person who is disposed to learn a few very easy lessons.

Officers of Mounted Volunteers would also do well to encourage especially their younger members in any athletic amusements, such as cricket, fencing, singlestick, or other exercises that may be conducive to health and muscular development. These young men must also remember that books and drill serjeants can only show the way to proficiency, but that individual perseverance alone can make the marksman and the swordsman, without which accomplishments a Volunteer horseman would be a mere automaton.

J. Bower, Lieut.-Col.,
and Capt. 1st Hants Mounted
Rifle Volunteers.

KEY TO PLATES.



PART I.

DISMOUNTED.

INTRODUCTION.

INHABITANTS of agricultural districts may not have such opportunities of joining the volunteer service as those who reside in towns, distance being the obstacle. But they have open to them, especially in hunting counties, where men ride good horses, a very important and inexpensive sphere of usefulness as irregular cavalry armed with rifles of long range.

The prevailing hindrance to the formation of corps of this description is an exaggerated idea of the difficulties of drill, and a consequent reluctance on the part of many an eligible man to undertake that which he does not think he can spare the time to accomplish.

This consideration necessitates a simplicity of system, such as is laid down in the book of instructions arranged under the authority of the Secretary of State for War by Colonel D. Lysons; and in reducing those instructions to practice, the compiler of this manual has endeavoured to work out the wider scheme of manœuvre herein-after explained, whereby volunteer irregular cavalry may, with very little trouble, be rendered formidable combatants.

Being in fact mounted riflemen, they are not intended to manœuvre with regular cavalry as part of the same integral body, but may be attached in brigade, and coming under the orders of officers of the regular army on such occasions, it has been found expedient to adopt the cavalry terms troop and division, in lieu of the mounted rifle terms company, subdivision, and section. And when two or more corps or troops may happen to meet on the same parade, they can be united in squadron of four divisions. This

drill is not applicable to mounted rifles armed with bayonets or sword bayonets, the infantry exercises necessary in their case are therefore omitted.

None are expected to join the cavalry branch of the volunteer army who cannot ride ; the school is therefore unnecessary, and a volunteer before being allowed to join should be seen ride over two or three fences as a qualification ; and the time thus saved may be very conveniently employed in district squad drills.

A troop is composed of two divisions, or four subdivisions, each subdivision consisting of neighbours residing in the same district. A place should be appointed at which the neighbours should agree to meet the instructor on stated days ; and to save wear and tear of uniforms, as well as the time that would be taken up in changing dress, volunteers should be allowed to attend squad drills in plain clothes. In this way they can learn their rudiments without much interference with their ordinary pursuits.

Before drilling on horseback, volunteers should go through the following course on foot, followed by the manual and platoon exercises.

Section 1.

Position,—Open Files.

FALL IN. — The volunteers will form in one rank, the right-hand man being first placed, and the remainder forming in succession, at arms length from each other, in an easy and natural position, head erect, eyes looking straight forward, shoulders square to the front, hands dropped by the thighs, heels together, toes turned outwards to an angle of about 60 degrees. Body inclining rather forward so as to throw the weight on the fore part of the foot.

Dressing.

EYES–RIGHT. — On the words EYES–RIGHT, the eyes will be directed to the right with a slight turn of the head.

DRESS. — On the word DRESS, each volunteer, except the right-hand man, will extend his right arm, palm of the hand upwards, nails touching the shoulder of the volunteer on his right, at the same time he will take up his dressing in line by moving till he is just able to distinguish the lower part of the face of the second volunteer beyond him; in so doing, care must be taken that he carries his body backward or forward with the feet, moving to his dressing with short quick steps, that his shoulders are kept perfectly square, and the position retained.

EYES—FRONT. — On the words EYES—FRONT, the eyes and head are to be turned to the front, the arm dropped, and the first position of the volunteer resumed.

Dressing by the left will be practised in like manner.

STAND AT EASE. — Draw the right foot back six inches, and throw the weight of the body upon it, bending the left knee a little; bring the hands together, slipping the palm of the right hand over the back of the left.

ATTENTION. — Drop the hands smartly by the thighs, and bring the right heel up to the left, resuming the first position.

Facings.—Plate I. and II.

In facing, the left heel never quits the ground, but the body turns on it as on a pivot, the right foot being drawn back to turn the body to the right, and carried forward to turn it to the left, as follows:—

TO THE RIGHT—FACE. — On the word FACE, place the hollow of the right foot smartly against the left heel, keeping the shoulders square to the front.

TWO. — On the word TWO, raise the toes, and turn a quarter circle to the right on both heels, which must be pressed together.

TO THE LEFT—FACE. On the word FACE, place the right heel against the hollow of the left foot, keeping the shoulders square to the front.

TWO. On the word TWO, raise the toes and turn a quarter circle to the left on both heels, which must be pressed together.

RIGHT ABOUT—FACE. On the word FACE, place the ball of the right toe against the left heel, keeping the shoulders square to the front.

TWO. On the word TWO, raise the toes and turn to the right about on both heels.

THREE. On the word THREE, bring the right foot smartly back in a line with the left.

RIGHT (or LEFT) HALF-FACE. On the word FACE, draw back (or advance) the right foot one inch.

TWO. On the word TWO, raise the toes and turn an eighth of a circle to the right (or left) on both heels.

RIGHT (or LEFT) ABOUT THREE-QUARTERS—FACE. When it is necessary to perform the diagonal march to the rear, the volunteer will receive the words RIGHT (or LEFT) ABOUT, THREE-QUARTERS FACE, upon which he will bring the ball of the right foot (not the ball of the toe) to the left heel, or the right heel to the ball of the left foot, and will make a three-quarters face in the required direction, in the same manner as he faces about.

The volunteers will also be taught to face, judging their own time, that is, without the words TWO, or THREE, resting a pause of nearly a second between each movement.

SQUAD—FRONT. When it is intended to resume the original front, after any of the foregoing facings, the word of command FRONT, may be given, on which the whole will face, as accurately as possible, to their former front.

When the volunteer has previously faced to the right-about, he will front by the right-about, but if he has faced to the right-about three-quarters, he will front by the left-about three-quarters, and vice versâ.

PLATE I.

Fig. 1.

TO THE RIGHT-FACE. TWO.

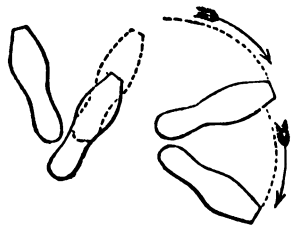


Fig. 2.

TO THE LEFT-FACE. TWO.

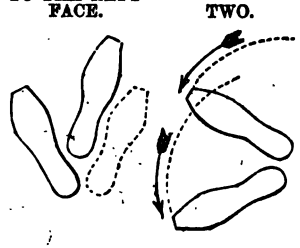


Fig. 3.

RIGHT ABOUT FACE. TWO. THREE.

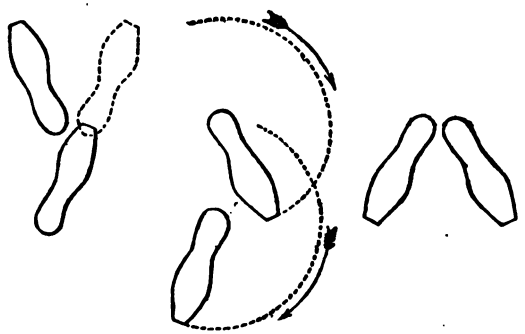


Fig. 4.

RIGHT HALF-FACE. TWO.

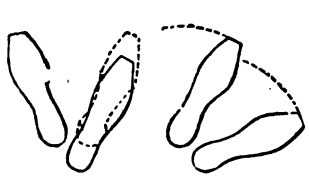
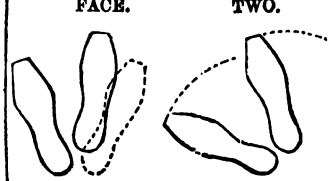


Fig. 5.

LEFT HALF-FACE. TWO.



Col. D. Lysons, delt.

PLATE II.

Fig. 1.

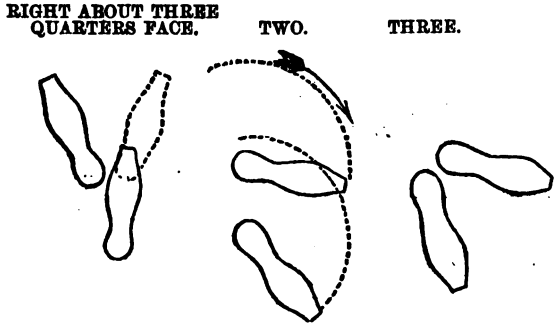
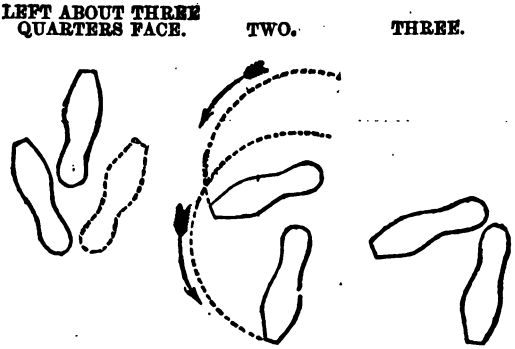


Fig. 2.



Section 2.

Marching.

FALL IN. — The squad will now form in close order, each man lightly touching his neighbour to the dressing band.

DRESS. — As already taught.

EYES FRONT. — As already taught.

The instructor will explain that length of pace in the quick march is 30 inches, and in the double march 36 inches; that the time or cadence, in the quick march, is 110 steps, and in the double march 150 steps in the minute. And this should be indicated by the instructor, audibly uttering the words LEFT, RIGHT, repeating until the volunteers become used to the time. They should also be taught to MARK TIME by raising the feet alternately without gaining ground.

BY THE RIGHT (OR LEFT). — On this caution the man on the named flank will take two points, such as stones or tufts of grass, one beyond the other, straight to his front to march on, and as he approaches the nearest point when marching, he will select a fresh one further off, so that he will always have two to keep him straight; the remainder of the squad will touch lightly towards him.

QUICK-MARCH. — On the word MARCH, all step off together with the left foot, the body inclining forward, shoulders square, hands and arms hanging easily by the side.

HALT. — On the word HALT, complete the step you are in the act of making, bring the heels together, and stand still.

DRESS. — Turn the eyes slightly to the dressing flank, and shuffle up, or back, in very short steps until you can just see the nose, or chin, of the second man from you, at the same time lightly touching your neighbour on the dressing hand.

Inclining.

When the squad is marching to the front, and it is desired to take an oblique direction, the word RIGHT (or LEFT)

INCLINE is given, and the men move in oblique lines, Plate III., upon which they are individually placed in echellon, as described in the half facings, which are equal to one-eighth of a circle, or 45 degrees. When it is intended to move to the original front without halting, the word ADVANCE is given, when each man will turn his body to the front, and move forward without checking the pace.

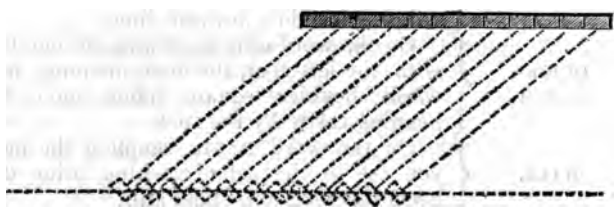
During the INCLINE the dressing is to that hand to which the incline is made; therefore, when moving by the right half turn, the right-hand man must pay particular attention to the length of pace, and move straight on the line he took up when he made his half turn. The other files must be careful that their right arms do no not get beyond the centre of the men's backs who are on their right; and if they keep this position, their right feet will just clear the left feet of the preceding files.

The same rules apply to inclining to the left.

If the incline has been properly performed, when the squad is halted and fronted it will be found in a line parallel to its original position.

PLATE III.

THE DIAGONAL MARCH.
TO THE RIGHT HALF FACE QUICK MARCH. HALF-FRONT.



The words of command are from the halt :—

RIGHT (or LEFT) HALF FACE.

QUICK MARCH.

HALT—FRONT.

The words of command whilst on the march are :—

RIGHT OR LEFT INCLINE.

ADVANCE. At the word ADVANCE the original direction is resumed, and the dressing maintained to the previously directing flank unless otherwise ordered.

Wheeling.

In this practice the outward wheeling man steps the usual pace of 30 inches, and the whole observe the same time, but each shortens his step in proportion as he is nearer the standing flank on which the wheel is made: during the wheel the men will touch lightly to the standing flank without closing in upon it, and will resist pressure from the outward or wheeling flank, looking outwards for the dressing.

RIGHT WHEEL. — On the word WHEEL, the right-hand man will face to the right, (which is equal to a quarter of a circle,) and stands fast.

QUICK MARCH. — On the word MARCH, the remainder of the squad step off together as above explained.

HALT. — On the word HALT, every man will halt as already taught, and will look straight to his front, unless ordered to dress.

DRESS. — Each man dresses to the standing flank.

EYES FRONT. — As already taught.

Wheeling to the left will be practised in the same manner.

It is also a very useful exercise to continue the wheel for several circles without halting, and also giving the word HALT–DRESS unexpectedly, and when only a part of a circle has been completed.

A squad should also practise wheeling on the move. In this case the pivot man marks time, moving his shoulders gradually round with the wheel of the squad. And at the word FORWARD, the whole will move on in the new direction without losing the step, dressing by the pivot flank unless otherwise ordered.

SECTION 3.

File Marching and Turning.

TO THE RIGHT FACE. — As already taught.

The volunteers will now cover each other in file, so that the head of the man immediately before may conceal the heads of all the others in his front.

QUICK MARCH. At the word MARCH, the whole step off together, the leading file marching straight on some two objects as already taught, and the remainder covering one another during the march, preserving the step and taking care not to increase the distance between each other.

FRONT TURN. On the word TURN, which should be given as the right foot is coming to the ground, turn to the left (or original front), and move on in line without stopping.

TO THE RIGHT TURN. On the word TURN, which should be given as the left foot is coming to the ground, turn the body to a right angle to the direction in which the squad has been marching and move on at once in file.

REAR TURN. On the word TURN, repeat the right turn as explained in the foregoing clause. The squad will then be marching to the rear or opposite direction from its original front.

FRONT-TURN or RIGHT ABOUT TURN. On the word TURN, each individual comes to the right about on his own ground, and in his own person performs the movement in the time prescribed for three distinct paces, and the whole move forward together at the fourth pace, dressing by the right or left as may be ordered.

Similar turns may be made to the LEFT and LEFT ABOUT, turning to the right on the left foot, and to the left on the right foot.

Double March.

Volunteers should be practised in changing the pace from the quick to the double, and from the double to the quick.

The double time being given by the instructor as already directed at page 5.

If from the halt the command is DOUBLE MARCH, if on the move the command is simply DOUBLE. At the word MARCH, in the former case, step off together at the long swinging step of 36 inches, the body well forward, shoulders square to the front, the whole position easy and elastic. If on the march, break into the double time at the word DOUBLE, and

at the word QUICK, resume the quick time and 30 inch step.

Wheeling in Files.

LEADING FILE RIGHT (or LEFT) WHEEL FORWARD.

The squad when marching in FILE may change its direction by wheeling the leading file to any angle required; on the word FORWARD, he advances on some two objects as already taught. The rest of the squad follow and wheel in succession as nearly as possible on the same spot as that on which the leading file changed his direction.

Files Forming Squad.

When a squad is in files, and the original right file is leading, it is called right in front, the direction in which the men are facing is then called the front, their left which was the original front is termed the pivot flank; their right the reverse flank. When the original left file is leading, the squad is called left in front, right is then the pivot, and left the reverse flank.

FRONT FORM-SQUAD.

To the Front in Quick Time.—When the squad marching in files is ordered to form to the front, the leading file will halt; the remaining files, when right is in front, will turn to the left, and *wheel* (*incline* on horseback, *see* page 67,) to the right, looking to the outward flank and feeling inwards.

FRONT FORM-SQUAD. DOUBLE.

To the Front in Double Time.—When a squad marching in files, right in front, is required to form to the front, in double time, the leading file will move on steadily in quick time, the remainder will make a half turn to the left, double up to their places, and take up the quick time successively as they arrive in line with the leading file.

ON THE LEADING FILE TO THE LEFT FORM SQUAD.

When marching in file, right in front, the leading file makes a left turn, advances two paces, and halts, the remainder of the squad form in the same way in succession on his left.

ON THE LEADING FILE to THE RIGHT-FORM SQUAD. — When marching in file, right in front, the leading file makes a RIGHT TURN (— *to the reverse flank*), advances two paces, and halts. The rest of the squad form in succession on his left.

ON THE LEADING FILE, TO THE RIGHT-ABOUT. FORM SQUAD. — When marching in file, right in front, the leading file makes a right about wheel, advances two paces, and halts, the rest of the squad wheel to the right in his rear, and form in succession on his left.

The same movements may be performed when marching in file with the left in front, the right being in that case the pivot, and the left the reverse flank.

The Side or Closing Step.

RIGHT CLOSE. QUICK-MARCH. — On the word MARCH, each volunteer will turn his eyes slightly to the right, and will carry his right foot as far as the foot of the man next to him, and instantly bring up his left heel to the right; he will then proceed to take the next step in like manner. The direction must be kept in a straight line to the flank.

During the side step, the touch must be kept to the closing flank.

SQUAD-HALT. — At the word HALT, the volunteers will bring their heels together, turn their eyes to the front, and remain steady.

Volunteers will be practised in closing to the left in like manner.

Volunteers will also be practised in taking any named number of paces to either flank, the word to be given thus, THREE PACES RIGHT CLOSE, QUICK-MARCH, NO word HALT is then required.

Dismissing a Squad.

TO THE RIGHT-FACE. — As already explained.

BREAK OFF. — On this word the volunteers will take a side pace to their left, at the same time striking the palms of their hands together in front of the body; after which they will disperse quietly.

Section 4.

Formation of a Troop Dismounted.

It is not absolutely necessary that volunteer irregular cavalry should dwell, at the expense of time, on dismounted field movements, but there may be opportunities of practising on foot when, from frost or other causes, mounted drills are not convenient.

FALL IN. As already taught in close order, page 5.

TELL OFF. The right-hand man will turn his head to the left, and audibly say ONE, the next man will in like manner say TWO, the third THREE, the fourth FOUR. The fifth will begin again at ONE, and so on by FOURS down the line.

But if the number on parade is not divisible by four, the odd files are those next to the four on the left, it being the rule that the four on the left are always complete as ONE, TWO, THREE, FOUR.

It will be explained that for purposes of skirmishing, it will be necessary to form two ranks, and to distinguish files; for these objects Nos. 1, 2 are front rank, and 3, 4 are rear rank men. Odd numbers, 1, 3, are right files; even numbers, 2, 4, being left files.

*Proving.**

FLANKS OF FOURS. PROOF. Nos. 1, 4 advance their right hands to arms' length.

AS YOU WERE. The right hands are dropped by the side.

FRONT RANK, PROOF. Nos. 1, 2, advance their right hands to arms' length.

AS YOU WERE. The right hands are dropped by the side.

The rear rank Nos. 3, 4 may be proved in the same way if thought necessary, which may be the case with beginners.

RIGHT FILES. PROOF. Nos. 1, 3 advance their right hands to arms' length.

AS YOU WERE. The right hands are dropped by the side.

LEFT FILES. May be proved in the same way.

* In proving when under arms, push the muzzle of the rifle to the front as in the "Stand at Ease" in Manual Exercise, page 17.

The troop is next told off by divisions and subdivisions. The right division is the right half, the left division is the left half of the whole. The right division, when in column or detached, is commanded by the senior subaltern officer, and the left by the junior.

Each division is composed of two subdivisions.

In line the post of the captain is in front of the centre of the troop; the subalterns on their respective flanks, viz., the senior on the right, the junior on the left. A serjeant is attached to each subdivision, and his post is in rear of its centre.

In column of divisions the subaltern officers take post on the pivot flank of their respective divisions, the serjeants in rear of their respective subdivisions.

In column of subdivisions the subaltern officers take post on the pivot flank of the leading subdivisions of their respective divisions. And the serjeants of the remaining two subdivisions take post on the pivot flank of their respective subdivisions.

When in column right in front, left is the pivot, and right is the reverse flank. When in column left in front, right is the pivot, and left is the reverse flank.

In column of FOURS, the officers and serjeants remain on the reverse flank, and the pivot man of each four preserves the covering and distance. The same rule applies to movements by twos.

Divisions and subdivisions are proved in the same way as fours.

FLANKS OF DIVISIONS (or SUBDIVISIONS) PROOF. — The right-hand man and the left-hand man of each division (or subdivision) advances his right hand to arms' length.

AS YOU WERE. — Drop the right hand by the side.

Formation in Two Ranks.

To form two ranks the troop or squad is told off as already taught, and the explanation of proving ranks and files as already given (page 11) may be repeated, to wit, Nos. 1, 2 are front rank, 3, 4 are rear rank men. And that odd numbers, 1, 3, are right files, 2, 4, left files; and that a blank file arising from there being a No. 1 without a 3, or *a 2 without a 4, will* in this exercise stand as a front rank

without a rear rank man, and that his place will be on the right of and next to No. 1 of the FOUR on the left.

Having proved ranks, the instructor will proceed—

REAR RANK, ONE PACE STEP BACK. MARCH. — At the word MARCH, the rear rank men, Nos. 3, 4, will take one step back with the left foot.

RIGHT—CLOSE. QUICK MARCH. — At the word MARCH, the two front rank men on the right will stand fast, the rest will close to the right by the side or closing step, the rear rank continuing the close until each man comes exactly behind his front rank companion. That is to say, No. 3 behind No. 1, and No. 4 behind No. 2, each man halting as he lightly touches the man on his right or dressing hand.

To re-form single rank it is only necessary to give that caution, followed by the word QUICK MARCH.

RE-FORM SINGLE RANK. QUICK MARCH. — At the word MARCH, the two front rank men on the right will order arms and stand fast, the rest will move by the side or closing step to the left. The rear rank men will in succession, as they come opposite their original places, step up into line, and order arms. The whole will dress from the right, and the instructor will then give the word STAND AT EASE.

PART II.

SECTION 1.

WITH ARMS,

Manual Exercise.

The troop or squad falls in for drill, standing at ease, with the rifle at the SUPPORT, that is, with the right hand brought forward and raised, holding the rifle with the three last fingers under the cock, the thumb above and the forefinger under the guard, and about three inches below the bottom of the waist belt, the arms to be kept near the body, the guard of the rifle to be turned

upward, and the muzzle to the right rear, the left hand laid over the right, the left knee bent, and the right foot drawn back about six inches.

ATTENTION. Spring smartly up to the position of the ADVANCE, that is, with the rifle perfectly upright against the side, the arm fully extended, the elbow close, the trigger guard to the front, the thumb above the guard, the forefinger under it, and the other fingers under the cock.

PRESENT ARMS. Seize the rifle with the left hand at the lower band, raising it a few inches by slightly bending the right arm and throwing the barrel forward about four inches from the shoulder, at the same time slip the thumb of the right hand under the cock, bringing the fingers under the guard to the front and slanting downwards.

TWO. The right hand raises the rifle, grasping the small of the stock, the left hand quitting its position above the grip, is placed above the lock, fingers round the stock, and the side of the hand resting on the guard, the point of the thumb as high as and opposite the left eye, both elbows close.

THREE. The rifle is brought down to the extent of the right arm, the butt projecting, letting the barrel fall on the bend of the left, the lock turned a little outward, and the cock resting against the knuckle joint of the first finger, this and the second finger only resting on the small of the stock, the others shut in the hand, the point of the first and middle fingers of the left hand touching the swell of the stock in front of the lock, the first finger close to the middle one, the others shut in the hand, the point of the thumb touching the fly or seam in the centre of the trowsers, the right foot at the same instant drawn back about six inches behind the left heel, both knees straight.

ADVANCE ARMS. — ADVANCE the rifle, steadying it with the left hand and bringing up the right foot.

TWO. — Drop the left hand to the side.

PORT—ARMS. — In one motion throw the rifle to a diagonal position across the body, the lock turned a little outward, the right hand grasping the small of the butt just below the right breast, the left holding the rifle at the grip, the thumbs of both hands pointing towards the muzzle.

N.B.—In this position the rifle may be half cocked in one motion by the word HALF COCK ARMS, for the purpose of inspecting the nipples, cock, &c., by placing the thumb of the right hand on the cock and with the elbow well raised to the front, drawing back the cock to the catch of the half cock. If the springs are to be eased at the command EASE SPRINGS, press the forefinger lightly on the trigger, draw the cock with the thumb to the full cock, with equal pressure on the trigger and cock, then lower hammer very carefully and gently on the nipple.

ADVANCE ARMS. — Bring the rifle down from the PORT to the ADVANCE, the left hand steadying it.

TWO. — Bring the left hand to its place by the side.

SLOPE—ARMS. — The same as in the first motion of the PRESENT ARMS.

TWO. — Bring the rifle to the left shoulder, muzzle slanting to the rear, and seize it with the left hand, the first joints of the fingers grasping the butt, thumb alone on the heel of it, the guard pressed gently against the shoulder, left elbow close to the side.

THREE. — Bring the right hand down to the side.

STAND AT EASE. — Bring the right hand smartly across the body and place it on the left hand, thumbs of both hands to be on the heel of the butt, that of the left to be nearest the lock, at the same time draw back the right foot six inches behind the left heel, the left knee to be slightly bent, the weight of the body resting on the right leg without constraint.

ATTENTION.	Bring the right foot up in line with the left, and the right hand smartly to the right side.
ADVANCE ARMS.	Seize the small of the butt with the right hand.
TWO	Bring the rifle to the right side and seize it as described in the position of ADVANCE, carrying the left hand across the body to steady it.
THREE.	Drop the left hand to the left side.
TRAIL—ARMS.	Seize the rifle with the left hand, little finger in line with the elbow, arm close to the body.
TWO	Raise the right hand and seize the rifle below the lower band, thumb and fingers round it, then bring the rifle down to a horizontal position at the full extent of the arm, and at the same time bring the left hand to the left side.
ADVANCE ARMS.	Raise the rifle to a perpendicular position at the right side and seize it with the right hand, as described in the position of ADVANCE, the left hand holding the piece above the lower band square with the left elbow, both arms close to the body.
TWO.	Bring the left hand to the left side.
ORDER—ARMS.	Seize the rifle with the left hand, thumb and fingers round the piece, little finger in line with the point of the right shoulder, but without moving the barrel therefrom, arm close to the body.
TWO.	Slip the rifle down with the left hand as low as the left arm will admit, keeping the arm and rifle close to the body, and with the right hand, which is to seize the rifle between the bands, place the butt quietly on the ground, even with the toe of the right foot, bringing the left hand at the same time to the left side, the right arm to be slightly bent, the thumb round the barrel pressed against the thigh, *fingers* slanting towards the ground.

TRAIL—ARMS. Bring the rifle to a horizontal position at the right side, holding it with the right hand below the lower band, thumb and fingers round the piece, at the full extent of the arm.

ORDER—ARMS. Bring the rifle to a perpendicular position at the right side, placing the butt quietly on the ground, and come to the position of ORDER-ARMS.

STAND AT EASE. Push the muzzle of the rifle to the front with the right hand, arm close to the side, at the same time draw back the right foot six inches behind the left heel, the left knee to be slightly bent, the weight of body resting on the right leg.

In ordering arms from any position, the greatest care is to be taken to prevent the rifle falling on or striking the ground, and it is not to be unnecessarily shaken in performing any of the motions of the manual exercise.

Volunteers will also be taught these movements, judging their own time, in the same manner as they have been taught the facings.

Marching with Arms.

The volunteers will then be practised, with their arms, in marching and turning, in quick and double time. In turning to the right about with trailed arms, they will bring the rifle to a perpendicular position on the first step of the turn, and trail again on the fourth.

When moving with trailed arms, at the word HALT, arms are to be ordered, and when the men are at the halt, with ordered arms, on the words QUICK or DOUBLE MARCH being given, arms are to be trailed, as they step off, without any command to that effect.

Section 2.

1. *Platoon Exercise.*

PLATOON EXERCISE BY MOTIONS. STANDING.

To serve as a caution, the squad standing with shoulder arms.

AS A FRONT (or REAR) RANK. PREPARE TO LOAD.

From the advance.—Seize the rifle as described in the first movement of "order "arms," and make a half face to the right, left toes pointing to the front, right toes to the right, eyes to the front.

TWO.

As a front rank.—Carry the left foot ten inches to the left front in a diagonal direction, carrying the body with it. *As a rear rank.*—Carry the left foot six inches to the front, moving the body with it, shoulders to be square to the front. Bring the rifle down in the left hand, and place the butt quietly on the ground against the inside of the left foot, barrel to the front; at the same time slip up the left hand, and seize the rifle round the nose cap, thumb pointing to the muzzle, arm close to the side; carry the right hand at once to the pouch (elbow to the rear), take up a cartridge, holding it with the forefinger and thumb close to the top, with the bullet in the palm of the hand.

LOAD.

Bring the cartridge to the forefinger and thumb of the left hand, and carefully tear off the end without spilling the powder, then replace the finger and thumb as before.

TWO.

Bring the cartridge to the muzzle, and pour the powder into the barrel, turning the elbow up, and palm of the hand to the front.

THREE.

Reverse the cartridge by turning the knuckles to the front, and put the bullet in the barrel nearly as far as the top, still holding the paper close above the bullet, elbow up.

FOUR.	By a turn of the wrist from left to right, and dropping the elbow into the side, tear off the paper; when this motion is completed, the little finger is to rest against the side of the barrel, the knuckles inclining towards the ground.
FIVE.	Seize the head of the ramrod between the forefinger and thumb, knuckles towards the body.
ROD.	Force the ramrod up and seize it in the middle between the first two fingers and thumb of the right hand, the remaining fingers to be closed in the hand, knuckles towards the body, elbow as high as the wrist.
TWO.	Draw the ramrod straight out, turn it over towards the front, and place the head of it on the bullet, still holding the ramrod with the two first fingers and the thumb, the remaining fingers closed in the hand, knuckles to the front, elbow near to the ramrod, shoulders square.
HOME.	Force the bullet down till the second finger touches the barrel, bringing the elbow close to the body.
TWO.	Slip the right hand up to the point of the ramrod, and seize it between the first two fingers and thumb, knuckles to the front, the arm to be kept as close to the ramrod as possible.
THREE.	Force the bullet steadily to the bottom, bringing the elbow down close in to the body, inclining the knuckles to the right.
FOUR.	By two firm pressures, raising the ramrod about one inch on each occasion, ascertain that the bullet is resting on the powder; all strokes which may indent the point of the bullet to be avoided.
RETURN.	Draw up the ramrod and seize it in the middle as in the first motion of the "rod."

TWO. Draw the ramrod straight out, turn it over, the point towards the front, and put it into its place, pressing it towards the body in so doing to prevent the point catching the band, raise the right hand, place the second joint of the forefinger on the head of the ramrod and force it home; then seize it between the second joint of the forefinger and thumb, and slip the left hand down at the same instant to its full extent and seize the rifle.

CAP. Turn the shoulders and body a half face to the right without moving the feet, bring the rifle to the right side, in a horizontal position, with the left hand, which will grasp it behind the lower band, thumb between stock and barrel; at the same time meet the small of the butt with the right hand, fingers behind the trigger guard, half cock the rifle with the thumb, left arm close to the body. *As a front rank*, the small of the butt must be pressed against the hip; *as a rear rank*, four inches above it.

TWO.

TWO.* Advance the fingers to the nipple, and with the forefinger throw off the old cap.

THREE. Carry the hand to the cap pocket, and take up a cap between the forefinger and thumb, the remaining fingers to be closed in the hand, elbow to the rear.

FOUR. Put the cap straight upon the nipple, looking to the front after doing so.

FIVE. Press the cap home with the flat part of the thumb, with the fingers closed in the hand and against the lock plate.

SIX. Bring the hand to the "small" of the butt, and hold it lightly with the fingers *behind the trigger guard*, thumb pointing to the muzzle.

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* In the regular service recruits are taught to take a cap from the pocket and put it on the nipple in six distinct motions; it has been considered that more *intelligent men might* learn it in two.

AT — YDS. READY. Carry the right hand to the sight, and with the forefinger and thumb adjust the sliding bar, placing the top even with the line, or to the place that indicates the elevation necessary for the distance named; then raise the flap without a jerk, from the top, if required; after which bring the hand back to the small of the butt, and full cock the rifle, and hold it lightly with the fingers behind the trigger guard, thumb pointing to the muzzle, and fix the eye steadfastly on some object in front.

PRESENT. Bring the rifle to the shoulder, carrying it well to the front, so as to clear the body as it goes up, keeping a firm hold of it behind the lower band with the left hand; raise the right elbow as high as the shoulder and a little forward; press the butt against the shoulder with the left hand, and bring the left elbow well under the rifle to form a support; hold the butt lightly with the right hand, the muzzle pointing a few inches below the object which the eye is fixed on, the forefinger along the outside of the trigger guard, and the left eye closed.

It is very important that the volunteer be well practised in bringing his rifle to the "Present," the instructor will therefore cause him frequently to repeat the motion as above described, directing him to bring the rifle down again to the right side at the words, AS YOU WERE.

TWO. Place the forefinger round the trigger like a hook, that part of it between the first and second joint to rest flat on the trigger, and restrain the breathing.

THREE. Raise the muzzle steadily until the top of the fore-sight is brought in a line with the object through the bottom of the notch of the back-sight.

FOUR. Press the trigger without the least jerk or motion of the hand, eye, or arm until the cock falls upon the nipple, keeping the eye still firmly fixed upon the object.

FIVE. Bring the rifle to the capping position, and shut down the flap, but without moving the sliding bar, and immediately seize the rifle with the right hand close in front of the left, fore arm close to the barrel; and after a pause, taking the time from the right, turn the barrel at once downwards, and bring the rifle to a perpendicular position opposite the right breast in the right hand, then seize it with the left hand at the nose cap, and come to the position of "prepare to load," 2nd motion.

The volunteer should always be taught to aim at some positive object when bringing his rifle to the "Present;" for this purpose small bulls'-eyes should be painted on a wall or fence one above another, two and four feet from the ground, and at lateral distances of three feet; they should be white, the size of a crown piece, with black centres the size of a shilling.

Particular attention is to be given to the following points, in the "Present," the body is to be firm and upright, the butt to be pressed firmly into the hollow of the shoulder, the rifle to be held firmly in the left hand, the sight to be upright, and in aiming, the muzzle to be steadily raised, until the top of the fore-sight is aligned upon the object on which the right eye is fixed through the bottom of the notch of the back-sight, the left eye being closed and the breathing restrained. In delivering the fire, the trigger is to be moved by pressure alone, without any motion of the hand, eye, or elbow; the right eye to continue fixed on the object after snapping, to ascertain if the aim has been deranged by the movement of the trigger or body.

2. *To Load from the Order.*

When required to load from the "Order," on the words PREPARE TO LOAD, the volunteer will make a half face to the right, as in loading from the shoulder, moving his rifle with the body. On the word TWO, he will bring his rifle with the right hand to the loading position, seizing it at the nose cap with the left hand; in all other respects he will proceed as already described.

3. *To come to the "Ready."*

AS A FRONT (or REAR) RANK AT — YARDS. READY.

From the Advance.—Make a right half face, the left foot to point to the front, the right foot to the right, at the same time seize the rifle with the left hand, the little finger in line with the right elbow.

TWO.

Bring the rifle to a horizontal position at the right side, grasping it firmly with the left hand behind the lower band, thumb between the stock and barrel, left arm close to the body; *as a front rank* the small of the butt must be pressed against the hip; *as a rear rank*, four inches above it. Then carry the left foot, *as a front rank*, ten inches to the left front in a diagonal direction, carrying the body with it; *as a rear rank*, six inches to the front, moving the body with it, and proceed as already described in the "Ready," page 21.

AS A FRONT OR REAR RANK AT — YARDS. READY.

From the Order.—Make a right half face as before described, carrying the rifle round with the body.

TWO.

Bring the rifle to a horizontal position at the right side, grasping it with the left hand, and proceed as above described.

4. *To Advance and Order from the Capping Position.*

ADVANCE ARMS.

To Advance.—At the word ADVANCE, bring the left foot back to the right. At the word ARMS, turn upon the heels to the front, at the same time bring the rifle to its place at the shoulder, seizing it with the right hand.

TWO.

Drop the left hand to the side.

ORDER ARMS. — *To Order.*—At the word "ORDER," bring the left foot back to the right, and seize the rifle with the right hand close in front of the left; fore-arm close to the barrel. At the word ARMS, face to the front, and with the right hand place the butt quietly on the ground, and drop the left arm to the left side, in the position at ordered arms, explained in the manual exercise.

5. *To Fire and Re-load Kneeling.**

FIRE AS A FRONT (or REAR) RANK KNEELING. AT — YARDS READY. — Sink down on the right knee; *as a front rank*, the knee should be 6 inches to the right, and 12 to the rear of the left heel; *as a rear rank*, 12 inches to the right and 12 to the rear of the left heel; the right foot upright and under the body, body resting on the heel, the lower part of the left leg nearly perpendicular, at the same time bring the rifle down to the ready position, adjust the sight, and cock as already described.

PRESENT. — As when standing, except that the left elbow is placed on the knee to form a support, the weight of the body still on the right foot.

TWO. THREE. FOUR. — As already explained when standing.

Front Rank.	*Rear Rank.*
Bring the rifle down to the capping position, at the same time raise the body off the right heel, and place the left fore-arm square on the left thigh six inches behind the knee; then shut	Bring the rifle down to the capping position, at the same time raise the body off the right heel, and place the left fore-arm square on the left knee; then shut down the flap without a

* Mounted Rifle Volunteers are, in practice, allowed to fire in any position,—kneeling being inconvenient with spurs on,—and sitting or lying down is found equally effectual. *See* Plate XX., page 81.

	Front Rank.	*Rear Rank.*
FIVE.	down the flap without a jerk, and return the hand to the small of the butt. After a pause come to the position of "prepare to load," by carrying the rifle in both hands round in front of the left leg, turning the barrel downwards at the same time, and with the left hand passing the butt close by the body over the right heel to the left rear to the extent of the left arm, meeting it at the same time with the right hand, the thumb in line with the muzzle, then seize the rifle with the left hand at the nose cap, afterwards carry the right hand to the pouch and proceed as already described.	jerk, and return the hand to the small of the butt; and after a pause come to the position of "prepare to load," by turning the rifle over in the left hand and placing the butt on the ground, lock uppermost, under the shin of the right leg of the front-rank man of the file on the right, meeting the barrel with the right-hand thumb in line with the muzzle, which is to be as high and in a line with the right shoulder, pointing to the rear, then seize the rifle with the left hand at the nose cap, afterwards carry the right hand to the pouch, and proceed as already described.
LOAD. ONE. TWO. THREE. FOUR.	As already explained when standing.	As already explained when standing.
CAP.	With the left hand raise the butt over the right heel, close by the body, in a slanting direction, until the left elbow is brought in front of the hip, at the same time dropping the right hand to the right side, then bring the rifle round in front of the left leg, to a horizontal position at the right side, and the shoulders to the right half-face, placing the left fore-arm at once square on the thigh six inches behind the knee,	With the left hand bring the rifle to a horizontal position at the right side, muzzle to the front, and let the body resume the right half-face, place the left fore-arm at once square on the left knee, at the same time meet the small of the butt with the right hand, and hold it lightly with the fingers behind the guard, and half cock the rifle, the thumb to remain on the cock; the rifle to be grasped with the left

	Front Rank.	*Rear Rank.*
	and meeting the small of the butt with the right hand, which is to hold it lightly, with the fingers behind the trigger guard, and half cock the rifle, the thumb to remain on the cock; the rifle to be grasped with the left hand, as detailed when capping standing; the butt to be pressed against the side.	hand, as detailed when capping standing; the butt to be pressed against the side.
TWO.	As detailed when capping standing.	

6. *To Advance and Order from the Capping Position, kneeling.*

ADVANCE ARMS, or ORDER ARMS. — At the word ADVANCE, spring up to the standing position, at the half-face to the right, bringing the right heel to the left; at the word ORDER, spring up in like manner, and at the same time seize the rifle with the right hand close in front of the left. At the word ARMS, proceed as described in advancing or ordering from the capping position standing.

7. *Platoon Exercise in Slow and Quick Time.*

The platoon exercise should first be taught by motions, as detailed, then in slow time, that is, only repeating the cautions and commands thus:—PLATOON EXERCISE IN SLOW TIME. AS A FRONT (OR REAR) RANK. PREPARE TO LOAD. LOAD. ROD. HOME. RETURN. CAP. FIRE A VOLLEY AT ——— YARDS. READY. PRESENT. After which the volunteers will be taught to load in quick time, that is, on the word IN QUICK TIME LOAD, they will go through all the motions, and when loaded and capped they will wait at half-cock, at the capping position, for further orders. When a corps is required to go through the platoon exercise at a review or inspection it will be performed first in slow time then in quick time, as above described, but not by *motions.*

Before firing, the manual and platoon exercises should be practised in two ranks, and very great care must be enjoined on the rear-rank men to lock close up to the front-rank men, an obvious and necessary precaution against accidents from the front rank's backs being exposed to the muzzles of the rear rank's rifles.

Section 3.

Inspection of Arms.

This observance should be very strictly attended to in order to ensure the rifles being properly preserved, for, if once allowed to become in the smallest degree rusty in the barrel, there is an end of all prospect of success at target practice.

ATTENTION. As already taught, the arms coming from the *support* to the *advance*.

PORT-ARMS. As already taught. Page 15.

HALF COCK-ARMS. As already taught, remove the snap cap from the nipple, and resume the hold of the small of the butt. *See* N.B. Page 15.

The inspecting officer will now pass down the line, and ascertain that the locks and sights are serviceable and perfectly clean, and that the nipples are free from rust, each man replacing his snap cap when the officer has passed him.

EASE SPRINGS. As already taught.

ADVANCE-ARMS. As already taught.

ORDER-ARMS. As already taught.

EXAMINE-ARMS. Seize the rifle with the left hand as in the first movement of *Order Arms*, and place the butt quietly on the ground between the feet, toe of rifle in a line with the toes of the boots, barrel to the front, and perpendicular, the left arm close to the body; then draw the muzzle stopper and place it in the left hand, and carry the right hand to the pouch, taking therefrom a piece of clean rag, which place in the jag or slit in the head of the ramrod, and seize the rod between the forefinger and thumb.

ROD. As already taught in loading, placing the head of the ramrod in the muzzle, with the rag between it and the breech of the rifle.

HOME. As already taught, except that in performing the fourth motion, raise the ramrod about six inches instead of one, and bring the right hand to the right side.

The officer will now proceed to ascertain if the insides of the barrels are clean or otherwise. Each man, as the officer approaches within two of him, will draw the ramrod from the barrel as in the "*return*" of the platoon exercise, and, holding the ramrod in the middle, place it under the right arm and over his left hand, the head of the ramrod to the front, knuckles of right hand downwards and arm close to the side.

If the inside of the rifle is clean no dirt will be found on the rag.

RETURN. As already taught, removing the rag from the jag, and resume the position of *order arms*.

PART III.

SECTION 1.

SKIRMISHING.

GENERAL PRINCIPLES.

To become expert skirmishers should be the special aim of Rifle Cavalry, who, being an intelligent class of men, at once possess the first requisite.

Besides acting on the offensive against an enemy's flanks, and covering the advance or retreat of a column, they should be able to reconnoitre and keep a general informed of an enemy's strength, position, and movements.

In covering a movement skirmishers must be careful to *overlap* the flanks of the main body.

RELATIVE STRENGTH OF SKIRMISHERS, SUPPORTS, AND RESERVES.

Infantry, when sent to the front to skirmish, divides its strength into *skirmishers*, *supports*, and *reserves*. The supports are equal in number to the skirmishers, and the reserve equal to one-third of the whole body.

RELATIVE DUTIES OF SKIRMISHERS, SUPPORTS, AND RESERVES.

The movements of skirmishers in a great measure depend on the position and movements of the enemy.

The *supports* assist and support the skirmishers in every way. The movements of the supports must, therefore, correspond with those of the latter, keeping as nearly as possible in rear of their centre.

The *reserve* is the point on which both supports and skirmishers may rally; it will also send relief to them when wanted, and should, therefore, be placed as near as possible in rear of the centre of the formation.

RELATIVE DISTANCES BETWEEN SUPPORTS, SKIRMISHERS, AND RESERVES.

In infantry the distance between supports and skirmishers on a plain is about 200 yards, and between reserves and supports about 300 yards; but so much depends on circumstances and the nature of the ground that no precise rule can be laid down. The nearer the supports can keep to the skirmishers, without exposing themselves, the quicker will they be able to render assistance.

The distance between reserves and the main body is 500 yards.

These rules are mentioned here for the guidance of volunteers in foot drill, and should be understood by them, but are not applicable to mounted drills, which are on so wide a scale as can only be ruled by the judgment of the officer commanding, as hereafter shown in Part VIII., page 75.

COVER. When under fire skirmishers must take advantage of all cover, and although they are not required to preserve correct distances and dressing on such occasions, they must be very careful never to get into the line of each others fire.*

In skirmishing with horses Volunteers must bear in mind that there are two kinds of cover; that a bush or a hedge row may hide men from an enemy's sight, but is not bullet proof, and that the smoke of a rifle fired from such cover would certainly attract a return fire. Common sense will, therefore, suggest the necessity of going obliquely to the front in such cases when dismounted to fire, or else the mounted files with the led horses should move to one side according to circumstances and the nature of the ground, so that the horses may not be in the direct line of the enemy's fire.

Behind bullet proof cover, such as a wall, bank, or undulations, and which mounted men may almost invariably command, this precaution is unnecessary.

POINTS OF DIRECTION. All lines of skirmishers move by their centre, except when *inclining*, and then they move by the flank to which the incline is made.

CONNECTING LINKS. The officer or sergeant in command of a line of skirmishers places himself at a convenient distance in rear of their centre, the supernumeraries taking up positions at equal distances from him along the rear of the line, special care being taken that the sergeant on the outer flank is watchful against surprise by an enemy's cavalry.

The officer or sergeant in command of the support should place himself in front of the centre, and in advancing will lead, but in retiring will follow his men. The supernumeraries (including in cavalry the guides, when not in the ranks) may be sent out from the supports, to keep up the communication with the skirmishers; and by a similar arrangement the reserve should keep up its connexion with the support.

* See Plate XIX., page 75.

These men when so employed are called *connecting links.*

SKIRMISHERS SHOULD HUSBAND THEIR AMMUNITION.

Skirmishers, whilst they should act with alacrity, should do nothing in a hurry; and this rule should be strongly enjoined with regard to firing, always bearing in mind that a cartridge in the pouch is better than a cartridge wasted in a random shot. The expert skirmisher, therefore, is the man who, without exposing himself, contrives to see his object, judge his distance, and take his deliberate aim before he delivers his fire.

WORDS OF COMMAND.

It is better to give orders by the voice than by the bugle; there is less risk of mistakes, and the enemy has less chance of discovering what is going on. Orders should therefore be passed along the line of skirmishers, and from front to rear, or rear to front, by means of the connecting links.

It is well, however, to know the bugle calls, and they should for this reason be practised at ordinary drills. (Pages 35 and 100.)

Section 2.

Formation in Two Ranks for Skirmishing Foot Drill.

Volunteer cavalry armed with rifles, who can spare the time, should learn the following simple movements on foot before they attempt the practical application of the system to operations on horseback.

The troop or squad having assembled will fall in as already taught, and after telling off will form two ranks.

1. *Rules for Extending in Skirmishing Order.*

In extending, as a general rule, it is the business of the rear rank man of each file to regulate the distance, and of the front rank man to look to the direction.

The number of paces that files are to extend from each other may be specified in the caution by the commander thus :—THREE PACES FROM THE RIGHT—EXTEND. When no number is specified, six paces will be the regulated distance between files.

Men in extended order may be directed to increase the distance between their files any given number of paces, from either flank, or the centre. The command will be given thus, TO EIGHT PACES FROM THE RIGHT,—EXTEND; if no number of paces is specified, or if the bugle sound the EXTEND, the skirmishers will open out one half more than their original extension; thus, if they are at six paces distance, they will open to nine.

A squad may be extended from the right file, left file, or centre file, or from any other named file.

2. *Extending from the Halt.*

FROM THE RIGHT (LEFT, CENTRE)—EXTEND. — On the word EXTEND, the file on the named flank, or the centre, will kneel down, the remainder will trail arms, face outwards, and extend in quick time.

The front-rank men will move direct to the flank, covering correctly on the march, the rear-rank men will cast their eyes over the inward shoulder, and tap their respective front-rank men, as a signal to halt, front, and kneel, when they have gained their proper distances.

3. *Closing on the Halt.*

ON THE RIGHT (LEFT, CENTRE)—CLOSE. — On the word CLOSE, the file on the named flank, or the centre, will rise, order arms, and stand at ease; the remainder will rise, face towards it, and close at quick time, halting, fronting ordering arms, and standing at ease, in succession, as they arrive at their places.

The file on which the skirmishers close may be faced in any direction; the remainder will form upon it, facing in the same direction.

4. *Extending on the March.*

FROM THE RIGHT (LEFT, CENTRE)—*EXTEND.* — On the word EXTEND, the file on the named flank, or the centre, will continue to move straight forward in quick time; the remainder will make a half turn from the flank from which they are ordered to extend, and move off in double time. As soon as each file has extended to its proper distance, it will turn to its front.

and resume the quick time, the rear-rank men covering their front-rank men, and the whole keeping in line with the directing troop or file.

When a troop or squad, extending on the march, is halted before all the files are extended, the remainder will make a second half turn outwards into file, break into quick time, and complete their extension as from the halt.

5. *Closing on the March.*

ON THE RIGHT (LEFT, CENTRE)—CLOSE. — On the word CLOSE, the file on the named flank, or the centre, will move steadily on in quick time; the remainder will make a half turn towards it and close in double time, turning to the front and resuming the quick time as they arrive at their places.

When a troop or squad closing on the march, is halted before all the files are closed, the remainder will make a second half turn inwards into file, break into quick time, and complete the formation as from the halt.

6. *Advancing in Skirmishing Order.*

TROOP OR SQUAD—ADVANCE. — On the word ADVANCE, the volunteers will rise and step off in quick time, with trailed arms, keeping their distances from the centre.

7. *Retiring in Skirmishing Order.*

TROOP OR SQUAD—RETIRE. — On the word RETIRE, the volunteers will rise, face to the right about, and step off in quick time, rear-rank in front, keeping their distances from the centre.

Volunteers in extended order will invariably face or turn to the right about, whether they are advancing, retiring, firing, or not firing.

8. *Inclining to a Flank.*

TO THE RIGHT (or LEFT)—INCLINE. — On the word INCLINE, the skirmishers will make a half turn to the flank to which they are ordered to incline, and move in a diagonal direction, until they are ordered

ADVANCE, or RETIRE.	to resume their original direction to the front or rear, by the word of command ADVANCE or RETIRE. If the skirmishers have made a half turn, and are again ordered to incline in the same direction, on the second word INCLINE, they will complete the turn by making a second half turn, and will take ground to the flank in file.
HALT.	On the word HALT, when volunteers are inclining, they halt, front, and kneel.

When inclining to the right, the right file directs; when inclining to the left, the left file directs. On the word ADVANCE or RETIRE, the centre file resumes the direction.

9. *Skirmishers changing Front or Direction.*

1. *From the Halt.*—A line of skirmishers halted, can change front on any two named files that may be placed as a base for the rest to form upon.

A change of front in this manner may be made at any angle.

CHANGE FRONT TO THE RIGHT (or LEFT) ON THE RIGHT (LEFT, or CENTRE) FILE.	On the caution the named file will rise, and the instructor will dress them in the direction required; as soon as they are placed they will again kneel.
DOUBLE-MARCH.	On the word MARCH, the whole will rise, and if all the files are to be thrown forward on a flank, they will make a half-face inwards, and run across by the shortest way to their places in the new line, dressing on the base file, as they successively halt, and then kneeling.

If all the files are to be thrown back on either flank, they will turn round, move across, and halt, front, and kneel successively as they arrive at their places in the new line.

If the change is on central file, part of the troop or squad will be thrown forward and the rest back, as above *described.*

SKIRMISHERS. RIGHT (or LEFT) WHEEL. — *On the March.*—A line of skirmishers on the march may change its direction gradually. On the word WHEEL, the pivot file will halt, and the remainder will circle round it, the front-rank men looking outwards for the dressing, and the rear-rank men keeping the distances from the pivot flank.

FORWARD. — On the word FORWARD, the whole line will advance by the centre in the new direction.

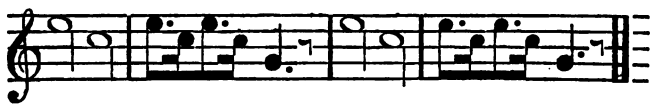
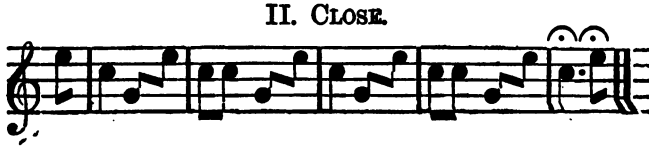
10. *Firing in Skirmishing Order.*

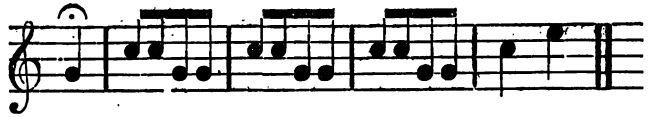
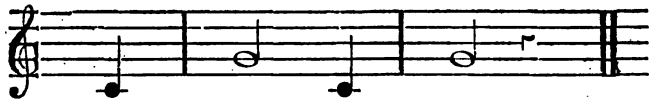
The men of a file must always work together; both men should never be unloaded at the same time; they will fire alternately, commencing with the front-rank man. On broken ground the volunteers must take advantage of all cover, and when advancing or retiring they will run from one place of cover to another, the two men of each file keeping together and taking care not to get in the way of other files. When moving, the loaded man should always be nearest to the enemy.

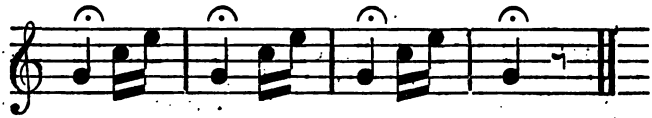
11. *Bugle Calls.*

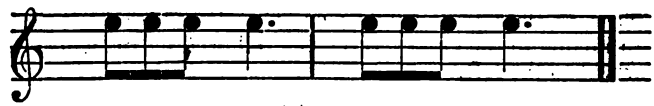
One G sounded on the bugle denotes the right of the line; two G's the centre; three G's the left.

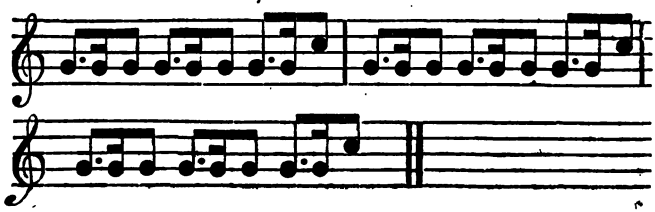
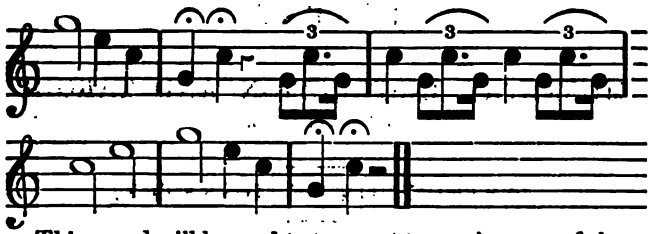
The G's, preceding any sound, denote the part of the line to which it applies; for instance, two G's before the extend signify to extend from the centre; one G followed by the close, to close to the right; one G followed by the incline, to incline to the right; three G's followed by the wheel, to wheel to the left.

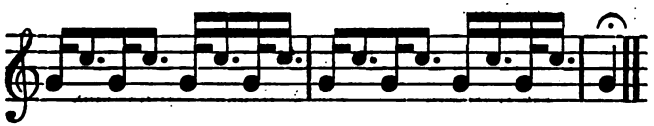
I. EXTEND.

II. CLOSE.

III. ADVANCE.

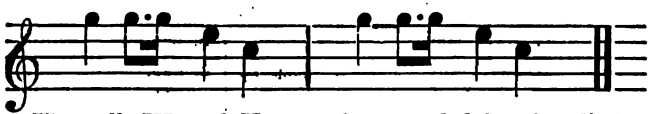
IV. THE DOUBLE TIME.

V. HALT.

The Halt annuls all previous Sounds except the Fire.

VI. COMMENCE FIRING.

VII. CEASE FIRING.

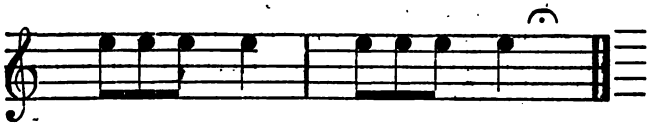


VIII. RETIRE.

IX. ASSEMBLY.

This sound will be used to turn out troops in cases of alarm by day or night, but must not be used at light infantry drill.

X. INCLINE.

XI. WHEEL.



The calls IX. and X. must be preceded by the distinguishing G's.

XII. THE ALARM OR LOOK OUT FOR CAVALRY.

PART IV.

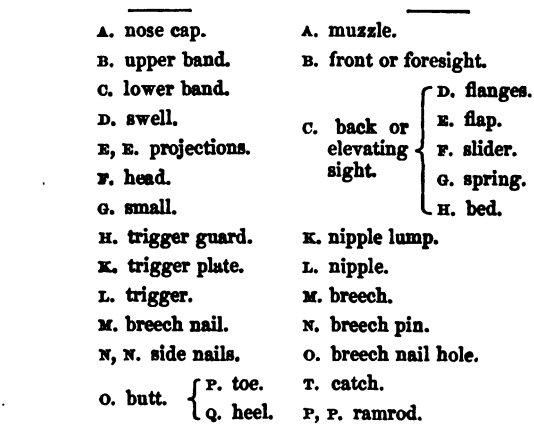
MUSKETRY INSTRUCTION AND TARGET PRACTICE.

INSTRUCTION OF MUSKETRY.

1. *Names of the different Parts of the Rifle.*

Every volunteer must learn the names of the different parts of his rifle.

PLATE IV.



The side of the rifle on which the lock is placed is called the lock side.

PLATE IV.

Fig. 1.

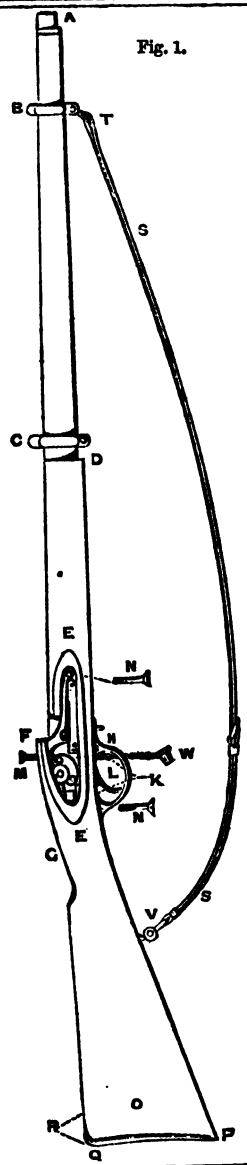


Fig. 2.

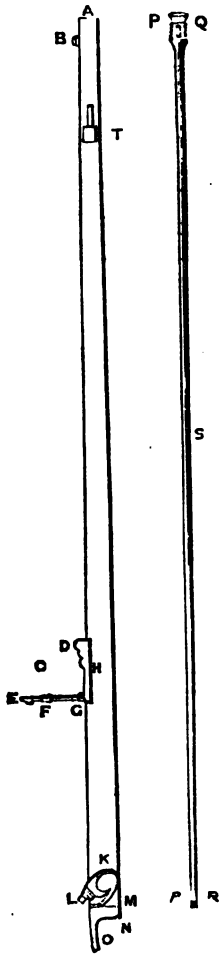


PLATE V.

Fig. 1.

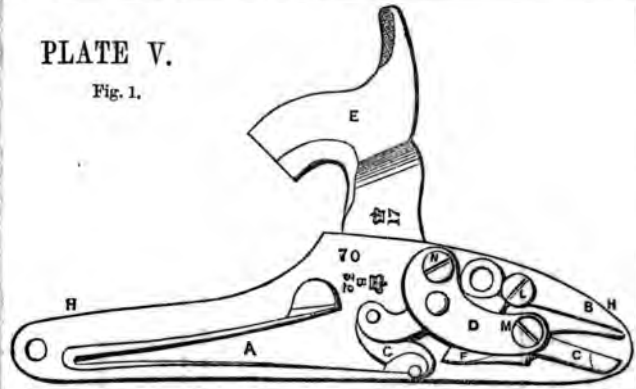


Fig. 2.

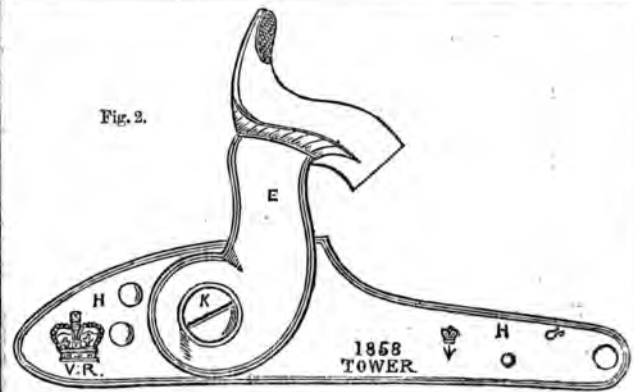


Fig. 3.

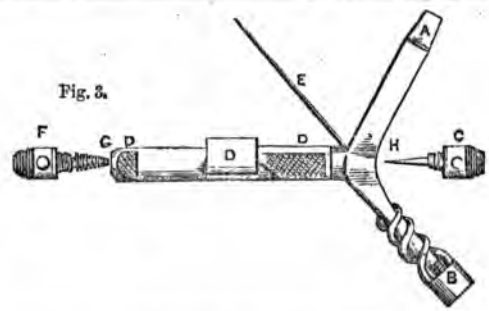


Plate V.

Fig. 1 and 2.—Lock.

A. main-spring.
B. sear-spring.
C. sear.
D. bridle.
E. hammer.
F. tumbler.
G. swivel.
H, H. lock plate.
K. tumbler nail or pin.
L. sear-spring nail.
M. sear nail.
N. bridle nail.

Fig. 3.—Nipple Wrench, &c.

A. turn screw.
B. worm.
C. drift.
D, D, D. cramp.
E. picker.
F. ball drawer.
G. nipple wrench.
H. oil bottle.

2. *Cleaning the Barrel.*

Every volunteer should learn the way to clean his rifle.

1. Place the rifle at full cock, and draw the ramrod.

2. Put a piece of rag, woollen if possible, or tow, into the jag, and twist it round so as to cover it.

3. Hold the rifle in the left hand, at the full extent of the arm, barrel downwards, with the forefinger and thumb in line with, and round the muzzle, heel of the butt resting on the ground to the rear.

4. Pour about a quarter of a pint of water into the barrel with care, so as to prevent any of it getting between stock and barrel, or into the lock through the tumbler axle hole; immediately afterwards put the ramrod into the barrel, and sponge or rub it carefully up and down to remove the dirt or fouling, forcing the water through the nipple to clear the touch hole. Repeat this process until the barrel is quite clean.

5. Wipe the barrel well out with rag or tow until it is perfectly dry, and afterwards with an oiled rag; then put the muzzle stopper in the barrel, and the snap cap on the nipple. Care should be taken to keep the snap cap dry when washing out the barrel, and to wipe the mouth of the hammer before letting it down on the snap cap.

6. On the following morning, and on every occasion before using the rifle, wipe the barrel out perfectly clean and dry.

7. The fouling which settles on the stock near the nipple lump when firing should, if possible, be removed without using water or a damp rag. On no account is a knife or sharp instrument of any description to be used to remove the dirt near the nipple lump or trigger plate.

8. By the foregoing mode of cleaning, the liability of the barrel to become rusty will be very much reduced, and the frequent necessity for removing it from the stock, which is always objectionable, be obviated.

9. In order to prevent water soaking into the stock, and at the same time to give it a smooth and polished appearance, rub it over well with oil, and apply a little bees-wax between it and the barrel, and between the lock plate and stock, to prevent water getting under the barrel or into the lock.

3. *Dismounting the Lock.*

1st. Unscrew and remove the tumbler pin.

2d. Put the lock at full cock, then place the cramp on the mainspring, and after letting the hammer down, remove it.

3d. Partly unscrew the sear-spring pin, then place the edge of the turnscrew between the bend of the sear-spring and lock-plate, to raise the former from the latter, after which unscrew the sear-spring pin, and remove the sear-spring.

4th. Unscrew the sear-pin and remove sear.

5th. Unscrew the bridle-pin and remove bridle.

6th. Remove the hammer (which is to rest in the hollow of the hand) by a few smart taps,—as near the lock-plate as possible,—with something softer than itself.

7th. Remove the tumbler.

8th. Remove the swivel from the tumbler.

4. *Cleaning the Lock.*

1. When the lock is dismounted, wipe the several limbs first with an oiled rag, and afterwards with a rag quite dry.

2. If any specks of rust are seen, either on the lock (more particularly the tumbler axle hole) or any of the limbs, they are to be removed with an oiled rag. No brick-dust, or powder of any kind, is to be used for this purpose, as such would have the effect of removing the case

PLATE VI.

FIG. 1.

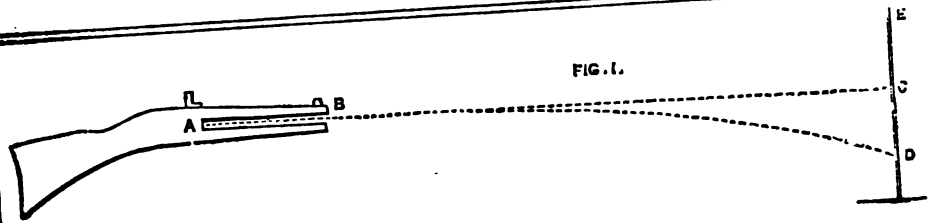


FIG. 2.

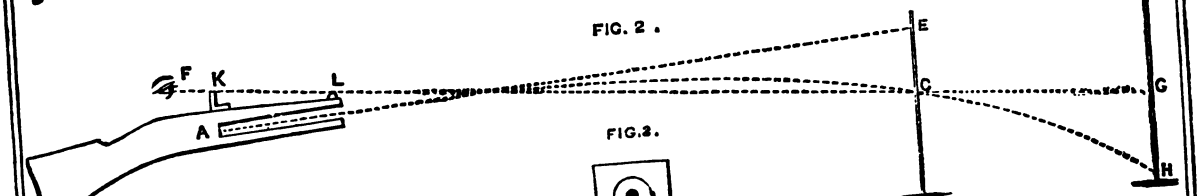


FIG. 3.

hardening from those parts that are not steel, and thus render them much more liable to rust.

3. In remounting the lock the threads of the several pins, as also the pivot and axle of tumbler, and pivots of swivel, should be oiled before putting them in their respective places, in order that they may work easily.

4. The other frictional parts of the lock to which it is essential to apply oil (which should be animal and not vegetable) are the nose of the sear, and between the sear and sear spring. Only a very small quantity of oil should be used, and applied either with a feather or the point of the pricker, as too much is likely to clog the parts.

5. *Remounting the Lock.*

1. Attach the swivel to the tumbler.

2. Place the tumbler in the lock-plate.

3. Fix the bridle on the pivot of the tumbler, and its stud in the lock-plate; then screw home the bridle-pin, which differs from the other pins (which are rounded off) by being flat at the end.

4 Place the sear between the bridle and the lock-plate, with its nose against the tumbler, and screw home the sear-pin.

5. Partly screw the sear-spring to the lock-plate, then with the thumb of the left hand press the spring against the body of the sear until the stud enters the stud-hole, and screw home the sear-spring pin.

6. Fix the hammer on the squares of the tumbler in a position as if on the nipple, and screw home the tumbler-pin.

7. Attach the swivel by its pivots to the claws of the mainspring, then put on the mainspring, by placing the stud in the lock-plate, and its catch against the fore-stud; after which place the lock at full-cock to remove the cramp; this being done, ease the lock to half-cock.

6. *Theoretical Principles.*

Every volunteer should understand the reasons for the rules, which are laid down for his guidance in practice. The following explanations will be found sufficient, though, where musketry instructors are employed, and time will permit, they may be given more at length.

1. The axis of the piece is an imaginary line along the centre of the barrel A, B, fig. 1, Plate VI.

2. The "line of fire" (B, C) is the continuation of the axis, and the direction in which the bullet would fly, with uniform velocity, were it not impeded by the resistance of the atmosphere and drawn down by the force of gravity.

3. The air is an elastic fluid that resists the bullet and reduces its velocity; the greater the velocity with which the bullet proceeds, the greater is the resistance it meets.

The "force of gravity" draws the bullet downwards from the moment it quits the muzzle, and acts with increased power the longer the bullet is exposed to its influence. These two powers combined, the one increasing as the other diminishes, cause the bullet to fly in a curved line, called the trajectory, B, D, fig. 1, Plate VI.

According to the above principles, if the axis of the rifle were directed to an object C, fig. 1, Plate VI, in a target, when fired, the bullet could not hit that mark, as the air and force of gravity would oblige it to fly along the trajectory to the point D, which would actually in the first 100 yards, be 1 foot 5 inches lower down; therefore, in order to hit the point C, it is necessary to elevate the muzzle till the axis of the barrel is directed to a point E, 1 foot 5 inches above it. To enable this to be done, the sights K, L, fig. 2, are so arranged as to place the rifle, when they are both accurately brought up to the line of sight, which is the line F, C, between the eye and the point aimed at, exactly in the required position.

If, however, the target were removed to a greater distance, and the rifle were fired from the same position, the bullet would follow the trajectory, and strike a point H below the point G aimed at; it is necessary, therefore, to increase the elevation of the muzzle as the distance increases, for which purpose the back sight is furnished with a flap and slider marked with the distances up to 1100 yards for which the elevations are required.

The thickness of the barrel at the breech is greater than its thickness at the muzzle, which in itself gives elevation; combined with this the lowest sight is arranged to give the proper elevation for 100 yards; when firing at a shorter distance it is therefore necessary to fire a little under the mark, at 50 yards about 8 inches, at 30 yards about 4 inches.

The volunteer must be very careful that he holds the sight of his rifle quite upright when taking aim; if it inclines to either side, instead of hitting the mark aimed at, the ball will invariably strike on that side to which the sight is inclined. See fig. 3, Plate VI.

Allowance must be made for the wind when firing, but the extent of the allowance can only be learned by experience.

If in loading the volunteer observes that there is not sufficient powder in the cartridge, or should he accidentally spill any, he must in firing aim a little high, otherwise the bullet will fall short of the mark.

7. *Aiming Drill.*

1. A musketry instructor or an experienced shot must superintend each squad, at this and the following drills; the squad should not exceed ten men.

2. In this exercise the volunteer is to be instructed how to aim and to adjust the back-sight of his rifle, and his progress is to be tested by making him aim at the different distances by means of a rest. If traversing rests are not available, a tripod formed of three stakes tied or looped near the top, supporting a bag of sand about 4½ feet from the ground, will answer the purpose.

3. The instructor is first to explain the principles of aligning the sights of the rifle on an object, confining the attention of the volunteer to the following simple rules:—

1st. That the sights should not incline to the right or left.

2nd. That the line of sight should be taken along the centre of the notch of the back-sight and the top of the fore-sight, which should cover the middle of the mark aimed at.

3rd. That the eye should be fixed stedfastly on the mark aimed at, and not on the barrel or fore-sight; the sights will then be brought up to the line of sight.

4th. That in aiming the left eye should be closed. If a man is not able to do this at the outset, he will soon succeed by tying a handkerchief over the left eye.

4. The instructor will also explain the difference between fine, full, and half sight in aiming, as follows, viz.:—

1st. Fine-sight is when the line of sight is taken along the bottom of the notch of the back-sight, the fine point of the fore-sight being only seen in the alignment; as A, fig. 1.

A

Fig. 1.

2nd. Full-sight is when the point of the fore-sight is taken in alignment with the shoulder of the notch of the back-sight; as B, fig. 2.

B

Fig. 2.

3rd. Half-sight is when the point of the fore-sight is aligned midway between the shoulder and bottom of the back-sight; as C, fig. 3.

C

Fig. 3.

5. Aiming with the half-sight is the usual method; aiming with a fine-sight will give a little less elevation; and aiming with a full-sight a little more.

6. The instructor will next cause each man to place his rifle in the rest and align it with the sight for 100 yards on a mark that distance from him; having done so, he will leave his rifle on the rest and step aside. The instructor will then see if the aim is correct, and should he discover any error, he will point it out and cause it to be corrected, or call upon another volunteer to correct it.

7. The foregoing proceeding is to be carried out, at every distance of 50 yards, from 100 to 900 yards, at "bulls'-eyes" of the following dimensions, viz.:—

From 100 to 300 yards, eight inches in diameter.
From 350 to 900 yards, two feet.

8. *Position Drill.*

In this drill the volunteers will be put through the following practices in squads of about ten men each, formed in single rank, at one pace apart, great care being taken that all their positions and movements are correct. When coming to the "present," they should be taught to aim at small "bulls'-eyes," painted as described in the Platoon Exercise, page 21.

First Practice.

Practice after the caution, POSITION DRILL, AS A FRONT (or REAR) RANK, STANDING, the word AT—YARDS—READY will be given, the volunteer will proceed as described in the Exercise. On the word PRESENT, without moving head, or eye, the volunteer will throw the rifle to the front of the right shoulder to the full extent left arm (the arms moving close in to the body); raise the rifle in so doing, keeping the sight upright; top part of the heel plate to be in a line with the top of shoulder, the muzzle to be a few inches below the mark eyes are fixed upon, the forefinger to be extended along the outside of the trigger guard, and both elbows to be inclined downwards. On the word TWO, he will bring the rifle smartly to the hollow of the right shoulder, as described in the Platoon Exercise, the forefinger remaining extended outside the trigger guard. On the word THREE, he will bring the rifle down to the capping position without altering the position of the body, head, or eye; in this manner the motions of the "Present" must be repeated several times, after which, on the word EASE SPRINGS, the volunteer will let the hammer down on the nipple, and will be directed to ORDER ARMS and STAND AT EASE.

After this, the volunteer will go through the practice, judging his own time, on the words AT—YARDS READY, FIRST PRACTICE JUDGING YOUR OWN TIME—PRESENT. When he has repeated the motions several times, without further word of command, on the word STEADY he will cease the practice, remaining at the capping position till directed to EASE SPRINGS—ORDER—ARMS and STAND AT EASE.

Second Practice.

In the second practice, the voluteer will go through all the motions of the "Ready" and "Present" by motions, including the pulling of the trigger as explained in the Platoon Exercise, except that in the fifth motion of the "Present," he will bring his rifle down to the capping position, and full cock, after which the movements of the "Present" will be repeated several times.

Third Practice.

In the third practice the volunteer will go through the motions of loading, standing, and judging his own time ; he will then practise independent file firing both standing and kneeling.

9. *Snapping Caps and Blank Firing.*

Volunteers who have not been accustomed to firing should first be practised in snapping caps while taking aim, until the tendency to wink at the explosion is overcome, after which they should be practised in firing blank cartridge to accustom them to the recoil of the rifle. About 10 caps fired at different drills should suffice for the former practice, with 10 rounds of blank cartridge for the latter ; 5 caps or rounds to be fired singly, 2 by file, and 3 in volleys.

10. *Judging Distance Drill.*

As proper elevation is of such great importance in firing, the volunteer should be well practised in judging distances; for this purpose men should be placed in front of the squad, at measured distances of 50 yards apart, from 50 to 300 yards for the first practice, and afterwards from 300 to 900 yards. The attention of each volunteer should be directed to the appearance of these men, and of their features, accoutrements, &c., at the different distances ; they must remember the distances at which the smaller objects become indistinct or invisible. Each volunteer should be called upon to explain to the instructor what he sees ; the explanation should be in a low tone of voice, in order that the rest of the squad may not hear.

It must be explained to the volunteer that the sun, the state of the atmosphere, and the background will make a difference in the appearance of the same objects at different times.

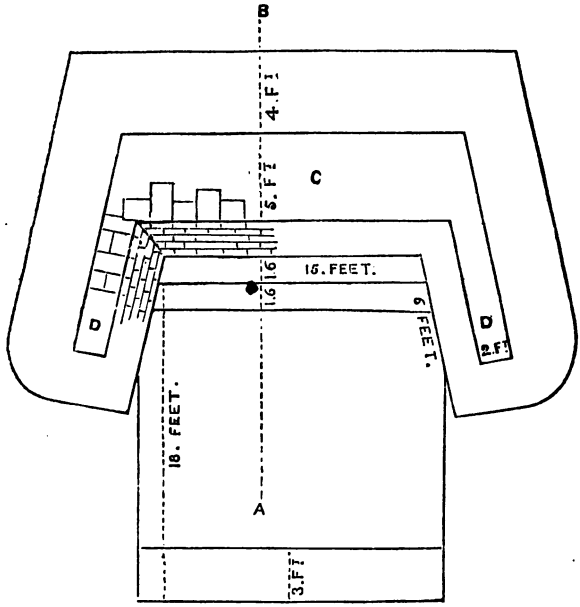
After the above exercises, volunteers should be practised in judging unknown distances ; the accuracy of their judgment will be tested, by measuring the distances with a chain or cord.

11. *Target Practice.*

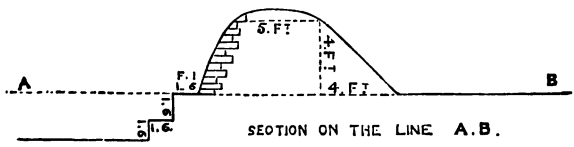
1. The volunteer having been thoroughly practised in the foregoing exercises, he will go through a course of target practice.

PLATE VII.

MARKER'S BUTT.



This is the smallest description of Butt that ought ever to be made, and the markers must always sit on the upper banquette close to the interior slope, which is to be revetted with turf.



SECTION ON THE LINE A.B.

2. The targets are to be six feet in height and two in breadth, constructed of iron of sufficient thickness to be rifle bullet proof; they should be coloured white with a mixture of whiting and size; the bull's-eye and circle describing the "centre," black, with lamp-black, water, and size.

3. Great care must be taken in lowering or raising the targets to prevent them being damaged.

4. In all cases where the nature of the ground admits of it, a trench is to be dug for the "markers," of the dimensions given in Plate VII, about fifteen yards to the front, and to one side of the targets, and in such a position that the markers may easily see the face of the target from it; the earth excavated should be thrown up on the side of the firing C; there should also be two epaulments, D, D, so as to screen the men not only from the shots themselves, but from any stones that may be thrown up by them.

5. The shots that strike the target are to be denoted by flags* of different colours raised above the butt. These flags, together with the number of points fixed as the value of the shots, are as follows:—

	Shots.	Flags.	Value in points.
In the practices to 300 yards inclusive.	Outer	White or yellow	1
	Centre	Dark blue	2
	Bull's-eye	Red and white	3
	Ricochet	Red flag waved in front of the butt	R
	Miss		0
In the practices at distances beyond 300 yards.	Outer	White or yellow	1
	Centre	Dark blue	2
	Ricochet	Red flag waved in front of the butt	R
	Miss		0

6. Ricochets, or shots which strike the ground before hitting the target, are to be signalled by waving the red flag twice to and fro in front of the target, and are to be counted as misses in individual firing, but noted in the register by the letter R.

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* The number of flags required is as follows, viz.:—

1 Large red flag, 6 feet square, to be planted in a conspicuous place in the neighbourhood of the range before the firing commences, and to remain till it is over, to warn persons off the ground.

4 { 2 red do. 2½ „ for the use of look-out men.
4 { 2 do. do. one for use at the firing point.
4 { do. do.

1 red and white do. do. for use in the marker's butt.
1 dark blue do. do.
1 white do. do.

The large flag may be obtained for 3*s.*, and the smaller ones for 1*s.* 8*d.*; lance poles 10 feet long should not cost more than 2*s.* 4*d.*

7. The signal for "danger," or "cease firing," is in all cases to be a red flag, which will be hoisted and planted on the top of the butt, whenever it is necessary to cease firing to re-colour the targets, or for any other purpose.

8. Whenever a shot strikes to the right, the flag denoting its value is to be inclined to the right, and *vice versâ*. When the shot strikes high, the flag is to be raised as high as possible, and when low, it is only to be raised high enough to be easily visible above the butt.

9. The section or squad is always to load by word of command. When everything is ready to commence, a signal will be made to the markers, and as soon as the danger flag is lowered, the officer is to order the practice to go on. The right-hand man of the front rank will then take a pace to his front, come to the capping position, and fire; after which he will come to the shoulder from the capping position, and form three paces to the rear of the point he previously occupied; the next man of the front rank will then move to the front and fire.

10. Whenever the hits on the target become too numerous to distinguish quite easily the new ones as they strike, the target is to be coloured afresh.

11. Every volunteer is to expend in his course of practice 90 rounds of ball ammunition, in the following manner, viz.:—

60 in individual firing,
20 in skirmishing, and
10 in volley.

12. The number of rounds to be expended at each distance, the distances and number of targets to be fired at by the several classes in individual firing, and the size of the bull's-eye, and centre for each class, are as follows:—

	Yards.	Rounds.		
3rd class.	150 - -	- 5	Two targets placed together.	Having a bull's-eye eight inches in diameter, and a black circle two feet in diameter.
	200 - -	- 5		
	250 - -	- 5		
	300 - -	- 5		
2nd class.	400 - -	- 5	Four targets placed together.	Having a black centre two feet in diameter and no circle.
	500 - -	- 5		
	550 - -	- 5		
	600 - -	- 5		
1st class.	650 - -	- 5	Six targets placed together.	Having a black centre three feet in diameter and no circle.
	700 - -	- 5		
	800 - -	- 5		
	900 - -	- 5		

13. Volunteers should never fire more than 10 rounds at any one practice.

12. *Volley Firing.*

The volunteer will fire 10 in volleys,* as detailed in the platoon exercise. The mark for this practice will be eight targets placed close together side by side, each having a separate bull's-eye and centre, of the dimensions detailed for the third class; the distance to be 400 yards.

13. *Skirmishing.*

Volunteers will fire 20 rounds in skirmishing order, both advancing and retiring between 400 and 900 yards. The marks for this practice to be eight targets placed in a row, each having a bull's eye and circle, as for the third class.

14. *Registers of Firing.*

The following registers will be kept by rifle corps. The forms may be obtained by application to the Secretary of State for War.

1. "*Target Practice Register*," War Office Form 1601, in which the volunteers' names must be entered previously to going out to practise.

2. "*Musketry Drill and Practice Return*," War Office Form 1600, which should be kept as a permanent register, in a book.

3. "*Table of performances in platoon and skirmishing "practices*," War Office Form 1603, and on the back of Form 1600.

4. "Recapitulation," showing the figure of merit, to enable different corps to compare with each other, on back of Form 1600.

5. When trained instructors are employed, a *Judging Distance Register*, War Office Form 1602, may also be kept.

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* File firing is not required of mounted riflemen. The extra 10 rounds of file-firing may be used in skirmishing if the range will admit with safety.

15. *Marking Points and Classification.*

The individual firing will be divided into three periods, 20 rounds to be fired in each.

In the first period each volunteer will fire five rounds at every distance of 50 yards, from 150 to 300 yards inclusive; the points gained will be marked in the "Target "Practice Register," Form 1601, and the total points obtained at each distance, will be transferred to "Musketry "Drill and Practice Return," Form 1600.

When the corps has completed the first period, the points obtained individually at the several distances, are to be added together, and the sum entered in the column "total "points" of the period, in the "Musketry Drill and Prac- "tice Return," Form 1600, to show the value of the performances of each volunteer, from which column a classification is to be made;—all those who have obtained 15 points and upwards, will fire the second period in the second class, and those who have not obtained this number, will fire their second period at the same distances as the first, that is, in the third class.

At the conclusion of the practices in the second period, the points obtained by each man at the several distances are to be added together, and the sum entered in the columns "total points," from which a second classification is to be made for the firing in the third period; all men of the second class who have obtained 12 points and upwards, are to pass into the first class; and all men of the third class, who have obtained 15 points and upwards, into the second class. Those men who have not obtained the number of points specified, will remain in the second and third classes respectively.

At the conclusion of the practices in the third period, the points obtained by each man are to be added together, and the sum entered in the columns "total points," from which a final classification is to be made, and entered in the columns for that purpose.

In volley firing the hits are to be counted as in the second class, bull's-eyes being reckoned only as centres.

In skirmishing the hits are to be counted as in volley firing; bull's-eyes being only valued as centres.

The average points obtained in the "skirmishing prac- "tice," and in the practices of "file and volley firing,"

added to the average obtained in the first period, will give the "figure of merit" of the shooting of the corps.

The dates on which the preliminary drills are performed will be entered in the "Musketry Drill and Practice "Return."

PART V.

SECTION 1.

CAVALRY TERMS OF FORMATION AND MANŒUVRE, DISTANCES, INTERVALS, AND PACES.

Terms of Formation and Manœuvre.

A Rank.—Two or more men placed side by side.

A File.—Two men, one behind the other when formed in two ranks, but abreast when marching in file.

A Single File.—One man marching singly followed by another.

Section of Four.—Four men abreast.

Subdivision.—Half a division, or fourth part of a troop.

Division.—Half a troop, a fourth part of a squadron.

Troop.—Half a squadron.

Squadron.—Two troops of four divisions.

Divisions in line are called "Right Division," "2nd," "3rd," and "Left Division." In column they are called "Leading Division," "2nd," "3rd" and "Rear Division," and each division when in column is led by an officer or serjeant.

Close Order.—The ordinary position of a troop, its officers, and supernumerary rank.

Order.—The increased distance taken by officers and supernumerary rank on some occasions of parade.

Front.—The direction towards which a line faces.

Point of Formation or Appui.—Any fixed object, marker, or body upon which a body of men is directed to commence its formation into line.

The Base is the troop division, subdivision, or section of four upon which a formation is made.

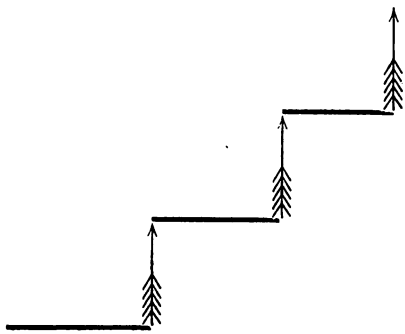
Change Front.—When a line throws forward or retires either of its flanks, or throws forward one and retires the other upon a base, which base merely wheels into the new direction without leaving its ground.

Change Position is when a line moves altogether off its ground.

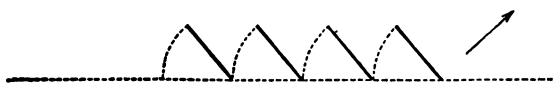
Inversion is when a squadron, troop, divisions, subdivisions, or sections of fours are not in their natural order, that is to say, when the right is on the left, as for instance, when sections of fours are wheeled to the right about.

Column is when a line is broken into several parts, each part following exactly behind the other.

Direct Echellon is when a line is broken into several parts, moving direct to the front or rear, thus :—



Oblique Echellon is when the line is broken into several parts by wheel from line into column less than a quarter circle, so as to be oblique with the former front, and parallel with each other, thus :—



Alignment.—A straight line drawn between two given points.

Pivot.—The outward man of that flank, upon which a body turns in wheeling.

Fixed Pivot is when the pivot man during the wheel turns upon his own ground.

Moveable Pivot is when the pivot man during the wheel describes a portion of a circle.

Formation of a Troop on Parade and Posts of Officers.—Distances.

Marching in File.—One yard from one horse to another, head to croup.

Close Order.—Captain one and a half horse's length in front of the line, the subaltern officers on the flanks of the line, supernumerary rank (including trumpeter) half a horse's length in rear. Guide covering the officer. Plate VIII., fig. 1.

Order.—Commanding officer two and a half horses' length in front of the centre, subaltern officers one horse's length in front of second file of their respective divisions, supernumerary rank four horses' length in rear of the line, trumpeter one horse's length on the right of the line.* Plate VIII., fig. 2.

From one squadron, troop, division, or subdivision to another in open column, the breadth of front of each squadron, troop, division, or subdivision.

Close Column of Troops.—One horse's length from one troop to another.

Close Column of Divisions.—The same.

Close Column of Squadrons.—Two horses' length from one squadron to another.

Close Column of Regiments.—Four horses' length from one regiment to another in brigade.

N.B.—Volunteer cavalry working by fours will adopt the same distances in close column, but to admit of taking ground to a flank by fours, or in deploying from close column into line, the place of the supernumerary rank must be on the reverse flank.

Intervals.

Between files in line, six inches from knee to knee.

Between open files, one yard, being equal to the space vacated by the advance of alternate files from the rank.

Between squadrons in line, one-fourth part of the entire front, the squadron being equal to the breadth of a division.

Paces.

Volunteer irregular cavalry are not required to move with the same precision as regular cavalry; but for occa-

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* *A horse's length is* eight feet; half a horse's length is four feet.

PLATE VIII.

Fig. 1.

FORMATION OF A TROOP ON PARADE.

CLOSE ORDER.

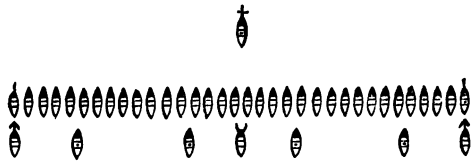
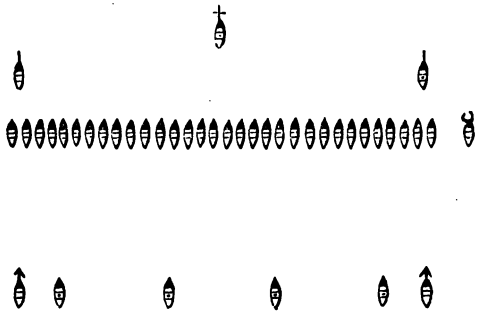


Fig. 2.

ORDER.



sions of parade the regulated paces should be understood and practised.

Walk.—Should not exceed four miles an hour.

Trot.—Eight miles and a half an hour.

Gallop.—Eleven miles an hour.

To practise these paces mark out a quarter of a mile, and walk it in 3 minutes and 45 seconds; trot it in 1 minute and 46 seconds; gallop it in 1 minute and 22 seconds.

The gallop in the loose exercises of irregulars, especially in skirmishing, is faster than regular cavalry could attempt, and is regulated by the speed of the slowest horse, regard being had to condition, the nature of the ground, and the distance to be gone over; matters for the judgment and discretion of the respective leaders of the *Troop, Division, Subdivision,* or *Section of Four.*

Section 2.

MOUNTED DRILL.

INTRODUCTORY REMARKS.

EQUITATION. Riding men do not require to be told that equitation means the power of preserving a firm seat, and to be able to govern the horse in all his paces by aid of the legs and bridle hand, but some have need to practice the latter requisite in order to have the right hand always free for the use of the sword.

SADDLING. Every sportsman knows that the place of the saddle is sufficiently back to admit of the free play of the horse's shoulder; that the girths should admit a finger between them and the belly of the horse; that the bridoon, or snaffle, should touch but not wrinkle the corners of the mouth;

BRIDLING. that the *bit* should be a finger's breadth above the tusk, or in mares, two fingers' breadth above the corner tooth; and that the curb chain should admit a finger between it and the horse's jaw.

STIRRUPS. The rule for length of stirrups is that the lower edge of the bar should be from two to three fingers' breadth above the upper edge of the boot heel; the ball of the foot should rest on the stirrup, the heel lower than the toes.

MOUNTING. It may seem superfluous to lay down rules under this head, but a little attention to mounting quietly and deliberately is very important, not only for appearance sake, but it in some degree checks the natural tendency of the horse to move forward the moment he feels the weight of his rider in the stirrup, and before he is in the saddle, a fault which causes disorder in skirmishing drills. For this reason cavalry volunteers should exercise themselves in mounting and dismounting according to the following instructions: not at squad drills, but in private, so as to acquire a good habit, and correct a bad one of springing abruptly into the saddle.

Prepare to Mount.—In four motions. *One.* Face to the right on the left heel, place the right opposite the stirrup parallel to the side of the horse, heels six inches apart; take the bridoon rein in the left hand, the bit rein in the right hand, the little finger between them; bring the left hand below the right on the neck of the horse, twelve inches from the saddle. *Two.* The right hand draws the reins through the left until the horse's mouth is lightly felt, right hand remaining over the left. *Three.* The right hand throws the reins to the off side, takes a lock of the mane, brings it through the left hand, and twists it round the left thumb, the left hand closes firmly on the reins and mane, the right hand quits the mane and takes hold of the stirrup, fingers to the rear. *Four.* The left foot is raised and put into the stirrup, as far as the ball; the right hand is placed on the cantle of the saddle, the left knee against the saddle;

the left heel drawn back to avoid touching the horse's side with the toe.

Mount, in three motions.—*One.* By a spring of the right foot from the instep, rise in the stirrup; bring both heels together; knees firm against the saddle, heels drawn back a little, the body erect and partly supported by the right hand. *Two.* The right hand moves from the cantle to the pummel of the saddle, and supports the body while the right leg passes clear over the horse's quarters to the off side, the right knee closes on the saddle, and the body comes gently into it. *Three.* The left hand quits the mane, the right hand quits the pummel, the bridle hand takes its proper position, the right hand falls easily on the thigh, back of the hand outwards; the right foot takes the stirrup without the help of hand or eye.

Prepare to Dismount, in three motions.—*One.* The right hand takes the rein above the left, the right foot quits the stirrup.

Two. The right hand holding the rein, the left slides forward upon it, about twelve inches from the saddle, feeling the horse's mouth lightly.

Three. The right hand drops the reins to the off side, takes a lock of the mane, as in mounting; the right hand is placed on the pummel, the body erect.

Dismount, in four motions.—*One.* Supporting the body with the right hand and left foot, the right leg is brought gently (not touching the horse's hind quarters or the saddle) to the near side, heels close; the right hand on the cantle to preserve the balance of the body as in mounting.

Two. Body is gently lowered until the right toe touches the ground.

Three. Resting on the right foot, the left stirrup is quitted, the left foot is placed in line with the horse's fore feet; the hands remain as in the former motion.

Four. Both hands quit their hold; the man faces to the left on the left heel, and brings the body square to the front, the right hand laying hold of the bridoon rein near the bit, raises the horse's head to the man's shoulder.

In practice numbers are not given.

Squad forming for Mounted drill.

Punctuality in the arrival of volunteers from a distance cannot always be ensured, but as soon as two or three come

on the ground they should be set in motion, so as to keep the horses from getting chilled or becoming restless.

The following practice will accustom the horses to turn, and their riders to cover in file and dress in line on the move, and go through the simple formations on horseback which have already been taught on foot.

FALL IN. The volunteers will form in succession from right to left at intervals of one horse's length, each man and horse square to the front, and head erect. Plate IX., fig. 1.

DRESS. The flank man and the man next to him being in a straight line, the remainder take up the dressing by a slight turn of the head and a glance of the eye to the dressing flank as taught in foot drill.

BY THE RIGHT. MARCH. All move off together at the word MARCH, the flank man fixing his eyes on some two objects straight before him, as already taught. *See* page 5. And to acquire this useful habit each volunteer should in turn be placed on the directing flank.

Correction of dressing, distances, and intervals whilst on the move must be done quietly and gradually.

RIGHT TURN. The turn is made at the last sound of the word, and may be repeated until done correctly. The distance between FILES being one yard between the horse's head, and the tail of the horse in front, fig. 2.

LEFT TURN. Brings the squad back into line, and the intervals are again one horse's length, dressing by the right, unless otherwise ordered.

RIGHT ABOUT TURN. At the word TURN, each man halts, and turns his horse round on his own ground, and when round the dressing hand is changed, that is to say, if marching by the right before the turn was made, the dressing is by the left when round, and marching in the new direction, fig. 3.

Turning to the LEFT and LEFT ABOUT may be practised in the same way.

PLATE IX.

Fig. 1.

FALL IN.

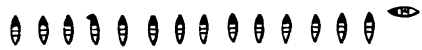


Fig. 2.

RIGHT TURN.

Fig. 3.

RIGHT ABOUT TURN.

PLATE X.

Fig. 1.

LEADING FILE RIGHT CIRCLE.

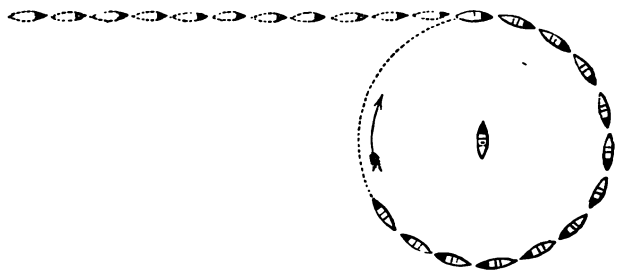
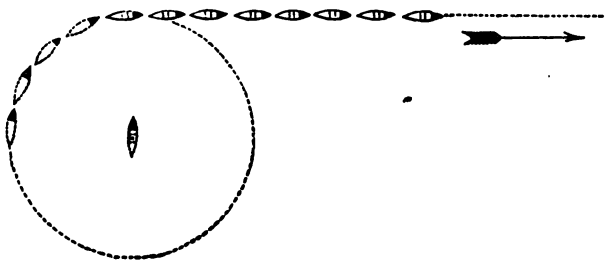


Fig. 2.

GO LARGE.



Circling.

LEADING FILE CIRCLE RIGHT. Being in file and on the move, the leading file circles round the instructor, followed by the rest of the troop (or squad) proportioning the size of the circle to the number of volunteers present. This practice affords an opportunity of correcting positions or adjusting accoutrements, and tends very much to steady the horses.

It is also a convenient way of sizing the troop by causing volunteers to change places in the circle, so that when in line the large horses shall be on the flanks, and the smaller ones graduate towards the centre.

Note.—Sizing may be thought superfluous in irregular cavalry, but it is as well, not only for the sake of appearance, but also in working by fours and in linking by sections, to have horses of equal bulk together.

GO LARGE. The leading file moves on in a direct line on some two objects, fig. 2.

LEADING FILE CIRCLE LEFT. In the same manner as CIRCLE RIGHT.

The circling may be changed from the one hand to the other at pleasure, and the pace may be varied from the walk to the trot or canter. It is a good way of practising the volunteers to keep their proper intervals of one yard between their horses' heads and the tails of those before them, and it enables the instructor to see that they manage their reins with the left hand, dropping the right hand by the thigh —available for the sword or rifle.

GO LARGE. As already taught.

FRONT TURN. The right-hand man being in front, LEFT TURN will bring the troop or squad into line, dressing by the right unless otherwise ordered.

HALT. The whole will halt, taking care to be one horse's length apart from each other.

DRESS. As already taught in foot drill, the instructor placing himself on the dressing flank.

EYES FRONT. As already taught.

PREPARE TO DISMOUNT. DISMOUNT. As already taught, but without numbers, the volunteers judging their own time or pause between each motion.

the incline is made. The flank man leads the incline by fixing his eyes on some two objects in the same way as in marching to the front, and must take care not to exceed the angle specified; the remaining volunteers moving parallel to the leader, taking care not to get too forward or too backward, and all maintaining equality of pace.

Note.—In foot drill the incline is made at an angle of 45 degrees; on horseback the angle is 34 degrees.

ADVANCE. The original direction is resumed, every horse square to the front, and the dressing to the same flank as before the incline was ordered.

LEFT INCLINE. The incline may be practised to the left in the same manner as to the right.

Wheeling.

Wheeling should first be performed from the halt, and afterwards practised on the move. During the wheel the dressing is to the wheeling or outward flank, the distance between files being preserved from the inward or pivot flank. The outward flank man regulates the pace and conducts the wheel so as to give room, and avoid crowding, the men being mindful to resist all pressure from the outward flank, and to yield to pressure from the inward flank. The horses heads should be kept rather outwards, the croups inward.

In wheeling on the move the wheeling flank moves one half faster than the rate at which the squad is marching.

Wheeling on the move less than a quarter of a circle, the pivot man only checks and turns his horse during the wheel, and resumes his former pace at the word FORWARD.

Wheeling on the move to a degree amounting to a quarter of a circle or more, the pivot man halts, and turns his horse during the wheel, resuming his former pace on the word FORWARD.

SQUAD—RIGHT (or LEFT) WHEEL, or RIGHT (or On the word MARCH, the wheel is performed as above explained; and on the occurrence of any unsteadiness the squad should be halted and the fault pointed out. After wheeling right and left and right and left about, the word CONTINUE THE

LEFT) ABOUT WHEEL. MARCH. — WHEEL should be given, and the squad should wheel round and round in several complete circles in order to steady the horses and improve attention to dressing.

HALT, DRESS, or FORWARD. HALT. — When the word HALT is given, the squad will halt and dress to the inner or pivot flank unless otherwise ordered. If the word FORWARD is given, the squad will resume the pace at which it was moving before the wheel, and go straight to the front, marching by the same flank as before the wheel was made.

PART VI.

SECTION 1.

Telling Off and Squad Drill when Told Off.

The volunteers will fall in and dress, in close order, and at intervals of six inches from knee to knee.

TELL OFF. — As already taught in foot drill.

FLANKS OF FOURS, PROOF. — As already taught in foot drill.

AS YOU WERE. — As already taught in foot drill.

Taking Ground to a Flank by Twos, and re-forming Line.

TAKE GROUND TO THE RIGHT BY TWOS, MARCH. — On the word MARCH, numbers one and two of the right section of fours will wheel off to the right, three and four will follow, and so on in succession. (Fig. 1.)

TO THE LEFT, FORM-LINE. — On this word the two leading men will wheel up to the left (the original front) and halt, the rest of the volunteers will form upon them in succession. (Fig. 3.)

The squad will take ground to the left by twos, and will re-form line to the right (the original front) in like manner. If there is an odd number, that is, a one without a two, or a three without a four, the man so numbered will move by himself, covering the left-hand men of twos when the right

PLATE XII.

Fig. 1.

A SQUAD WITH A BLANK ODD FILE.

TELLING OFF. TAKE GROUND TO THE RIGHT BY TWOS. BY FOURS RIGHT WHEEL.

Fig. 2.

A SQUAD WITH AN ODD FILE.

TELLING OFF. TAKE GROUND TO THE RIGHT BY TWOS. BY FOURS RIGHT WHEEL.

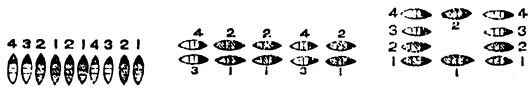


Fig. 3.

TO THE LEFT FORM LINE.

Fig. 4.

A SQUAD WITH A BLANK FILE.

TELLING OFF. TAKE GROUND TO THE RIGHT BY TWOS. BY FOURS RIGHT WHEEL.

Fig. 5.

BY FOURS LEFT WHEEL INTO LINE.

of the squad is leading, and the right-hand men of twos when the left is leading. (See Plate XII., fig. 1.)

Taking Ground to a Flank by Fours, and wheeling up again into Line.

BY FOURS RIGHT WHEEL, MARCH. — On the word MARCH, the whole squad will wheel by fours to the right, each number one will turn his horse by pressing his right heel against his horse, keeping the horse's fore feet as nearly fixed as he can, numbers two, three, and four wheeling round him.

HALT. — When the fours have wheeled the quarter circle they will be halted.

At the first drill, the sections of fours should be wheeled one at a time, commencing with that on the right, thus—BY FOURS RIGHT WHEEL, RIGHT FOUR ONLY—MARCH. HALT. NEXT FOUR—MARCH, &c.

If there are any odd men they will wheel by themselves, and will cover as shown in Plate XII., figs. 1, 2, and 4.

LEFT WHEEL INTO LINE, MARCH. — On the word MARCH, the whole squad will wheel up by fours into line to the original front, numbers four turning their horses to the left on their fore feet, numbers one, two, and three wheeling round them. Plate XII., fig. 5.

HALT. — On the word HALT, the whole will halt and remain steady, unless ordered to dress.

In like manner the squad will be taught to wheel by fours to the left, and then to wheel to the right into line.

When the volunteers understand their places, they will be taught to wheel into fours, and then to move on in fours to the flank by the word FORWARD, care being taken to preserve the distance of one yard between the fours, measuring from the head of a horse to the tail of the horse in front. A squad advancing in line will also be taught to wheel to a flank by fours without halting on receiving the words BY FOURS RIGHT (or LEFT) WHEEL, followed by FORWARD as soon as the fours are at right angles to the original front. The squad marching in fours will likewise be practised in wheeling up into line and then moving to the original front without halting, the commands being LEFT (or RIGHT) WHEEL INTO LINE, followed by FORWARD.

Wheeling in Single Files, Twos and Fours.

RIGHT (or LEFT) WHEEL. A squad marching to a flank in single files may change direction as follows ; on the word WHEEL, the leading man will wheel to the right (or left) and move on at right angles to his former direction without checking the pace, the remainder of the squad will follow him, each volunteer changing his direction as he arrives at the spot where the leading file wheeled.

A squad marching in twos or fours will wheel in the same manner as a squad in single file, each two or four wheeling in succession as it arrives on the same spot. Although at drill the wheel will usually be made at right angles, the direction may be changed at any angle, an officer or guide directing the leading man, two or four. By the application of this wheel, a squad after it has been marched off to either flank in single files, twos or fours, may be moved in any required direction.

SECTION 2.

FORMING LINE TO THE FRONT, TO THE PIVOT FLANK, OR TO THE REVERSE FLANK.

1. *Explanation of Pivot and Reverse Flank may be repeated.*

When a squad is ordered to move to the right in single files, twos or fours, the direction in which it moves is, for the time, called its front ; the original front, which has become its left, is called its pivot flank, the opposite side the reverse flank. When moving to the left, the original front which has become the right, is the pivot flank, the opposite side the reverse flank.

A squad taking ground to the right is said to be formed, or to be marching, right in front ; a squad taking ground to the left is called left in front. When right in front left is pivot, when left in front right is the pivot.

PLATE XIII.

Fig. 1.

ON THE LEADING FILE, FRONT FORM SQUAD.

Fig. 2.

ON THE LEADING FILE, RIGHT FORM SQUAD.

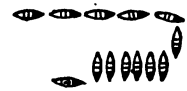
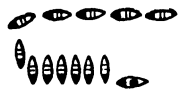


Fig. 3.

ON THE LEADING FILE, LEFT FORM SQUAD.



2. *Forming Squad to the Front from Single Files, Twos, and Fours.*

ON THE LEADING FILE. FRONT FORM SQUAD,

To the Front from Single Files.—Plate XIII., fig. 1.—When the squad is marching in single files, on the word SQUAD, the leading volunteer will continue to advance one horse's length and will then halt, the remainder will incline to the pivot flank, and form up in succession in line with the leading file.

To the Front from Twos and Fours.—A squad marching in twos or fours will form to the front in like manner.

To the Front at the Trot.—A squad may also form to the front without halting, in which case, on the word FRONT FORM–SQUAD, TROT, the leading volunteer, two or four, will move on steadily to the front without changing the pace, the remainder will trot up to their places. If the squad is moving at the trot, ON THE WORDS, FRONT FORM–SQUAD, GALLOP, the leading file will continue to trot, the rest will gallop up to their places.

3. *Forming Squad to the Pivot Flank.*

The manner of forming line to the original front, that is, to the pivot flank, is as Right-Close. Page 60.

4. *Forming Squad to the Reverse Flank.*

When a squad is required to form line to the reverse flank from single files, from twos or from fours, in order to preserve the relative positions of the men as regards each other unaltered, the squad must be, as it were, unrolled in the following manner :—

REVERSE FLANK, ON THE LEADING FILE. RIGHT FORM SQUAD.

From Single Files.—Plate XIII., figs. 2 and 3.—If the squad is marching, right in front, on the word SQUAD, the leading volunteer will wheel to the right and advance one horse's length, to give room behind him, the next volunteer will pass on behind the first and then wheel up on his left, and so on in succession, all dressing by the right as they come up into line.

From Twos or Fours.—A squad marching right in front in twos or fours will form to the reverse flank in the same manner as from single files, the leading two or four wheeling to the reverse flank and advancing one horse's length, the rest moving on and forming successively on the left.

A squad left in front marching in single files, twos, or fours, will form to the reverse flank (the left) in like manner.

5. *Naming the Pace of Movements.*

In the preliminary drills the movements should all be performed at the walk, the word MARCH is therefore sufficient, but when more advanced it will be necessary to name the pace at which the volunteers are to move, thus, BY THE RIGHT, WALK-MARCH. By THE RIGHT, TROT-MARCH. By THE RIGHT, GALLOP-MARCH.

SECTION 3.

Decreasing Front.

BY DIVISIONS OR SUBDIVISIONS RIGHT (or LEFT) WHEEL, FORWARD. LEADING DIVISION (or SUBDIVISION) LEFT (or RIGHT WHEEL.

The front of a troop advancing in line may be decreased by wheeling it to either flank by divisions or subdivisions, and then wheeling the column into the original direction.

RIGHT (or LEFT) DIVISION (or SUBDIVISION) TO THE FRONT, REMAINING DIVISIONS (or

It may frequently be found more convenient to order the division (or subdivision) which is intended to take the lead to move to the front at once, and the remaining divisions (or subdivisions) to wheel towards it. When they have completed the quarter circle, on the word FORWARD,

PLATE XIV.

Fig. 1.

RIGHT IN FRONT.

DECREASING FROM COLUMN OF DIVISIONS TO COLUMN OF FOURS.

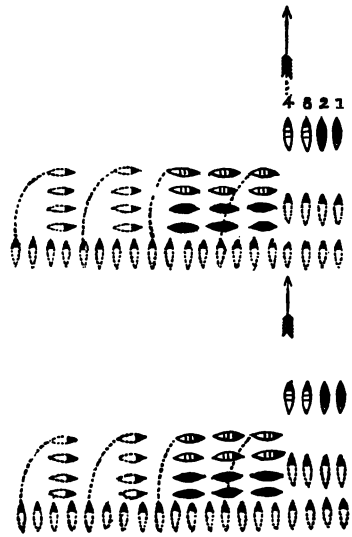


Fig. 2.

FROM FOURS TO TWOS.

Fig. 3.

FROM TWOS TO SINGLE FILE.

SUBDIVISIONS) RIGHT (OR LEFT) WHEEL, FORWARD.

they will move on in column, wheeling successively to the original front and following the leading division (or subdivision).

ADVANCE BY FOURS FROM THE RIGHT OF DIVISIONS OR SUBDIVISIONS.

From Divisions or Subdivisions to Fours.—In like manner a column of divisions, or subdivisions, may be reduced to column of Fours. The leading Fours of divisions, or subdivisions, move to the front, the remaining Fours wheel towards the leading Four, and again in succession to the original front. Plate XIV., fig. 1.

FORM TWOS.

The front may be further reduced to *Twos*, thus:—

From Fours to Twos.—Plate XIV., fig. 2.—If right is in front, on the word TWOS, all will halt for a moment except the two front-rank men (Nos. 1 and 2) of the leading four, who will go straight on, following the officer or guide; the two rear-rank men (Nos. 3 and 4) will incline to the right, and will follow the two front-rank men. The second four will do the same, and so on.

If left is in front the two rear-rank men (Nos. 4 and 3) will move on, and the two front-rank men (Nos. 2 and 1) will incline to the left and follow them.

FORM SINGLE FILE.

From Twos to Single File.—Plate XIV., fig. 3.—If right is in front on the word FILE, all will halt for a moment except No. 1 of the leading four, who will go straight on, following the officer or guide; No. 2 will incline to the right and will follow No. 1. No. 3 will then move straight on, No. 4 will incline to the right and follow No. 3. The second four will do the same, and so on.

If left is in front No. 4 will move on, No. 3 will incline to the left and follow No. 4; No. 2 will then move on and No. 1 will incline to the left and follow No. 2, and so on.

Increasing Front.

FORM TWOS, TROT.

From Single File to Twos.—Plate XV., fig. 1.—On the word TROT, if right is in front, Nos. 2 and 4 of each four will incline to the left (the pivot flank), and will respectively trot up by the side of Nos. 1 and 3.

If left is in front, Nos. 3 and 1 will incline to the right (the pivot flank), and will respectively trot up by the side of Nos. 4 and 2.

FORM FOURS, TROT.

From Twos to Fours.—On the word Trot Nos. 3, 4 will incline to the left (or pivot flank) and trot up by the side of Nos. 1, 2. Plate XV., fig. 2.

If left is in front Nos. 2, 1 will incline to the right and trot up by the side of Nos. 4, 3.

FORM SUB-DIVISIONS (OR DIVISIONS), TROT.

From Fours to sub-divisions or divisions. On the same principle a column of Fours may spring into column of sub-divisions or divisions. On the word Trot the leading Fours move straight on, and the remaining Fours incline to the pivot flank, and trot up into their places. Plate XV., fig. 3, 4.

A Troop forming Column of Divisions or Subdivisions on its own Ground.

In ordinary practice column of divisions, or subdivisions, is formed by wheeling a quarter circle towards either flank. But it may happen when working with other troops, that a line is thrown backwards into column.

To enable irregular cavalry working by *Fours* to conform to such a movement, they must wheel about on the pivot flanks of *Fours*, and when so inverted the divisions or subdivisions will wheel a quarter circle, *halt*, and at the word *front* will repeat the wheel about by *Fours*, which will complete the formation. *See* Plate XVI.

FORM COLUMN OF DIVISIONS OR SUBDIVISIONS, RIGHT IN FRONT.

At the caution the subaltern officers will move out, and place themselves in front of, facing, and *one* horse's length from the left or pivot man of their respective divisions. Fig. 1.

PLATE XV.

Fig. 1. RIGHT IN FRONT. Fig. 2.

INCREASING FROM

INGLE FILES TO TWOS. TWOS TO FOURS.

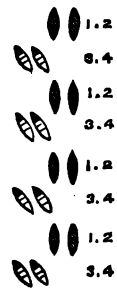


Fig. 3.

FROM FOURS TO SUB-DIVISIONS.

Fig. 4.

FROM SUB-DIVISIONS TO DIVISIONS.

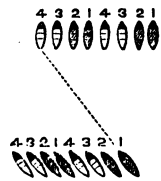


PLATE XVI.

Fig. 1.

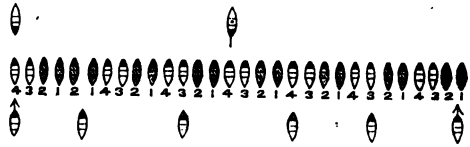


Fig. 2.

Fig. 3.

DIVISIONS, RIGHT WHEEL.

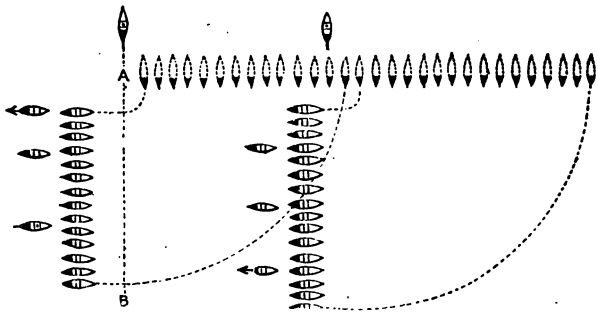
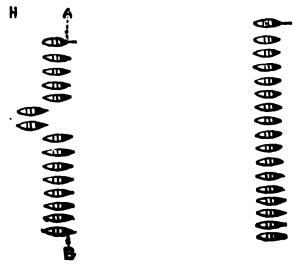


Fig. 4.

HALT, FRONT.



BY FOURS, RIGHT ABOUT WHEEL, MARCH. — At the word MARCH, each *Four* will wheel to the right about, or half a circle. Nos. 1 turning as nearly as they can on their own ground, Nos. 2, 3, and 4 wheeling round them. Fig. 2.

HALT. — When the *fours* have completed the *wheel about* or half circle they will be halted.

The supernumerary rank, viz., the serjeants, guides, and farriers, will at the same time turn their horses to the *right about*, each on his own ground.

Odd files move out two horses' lengths, wheel to the right about, and move back into their place in the inverted line.

BY DIVISIONS, RIGHT WHEEL, MARCH. — At the caution the subaltern officers will advance one horse's length, their horses' heads will thus be the points which will become the pivot flanks of division when in column. At the word *March* each division, now inverted, will wheel a quarter of a circle to the right on the moving pivot No. 1 of the *Four* on the proper left (but now on the right). This moving pivot will keep one horse's length of space between his own right side, and the officer's horse's head, and completing the quarter circle one horse's length beyond the line A, B. Fig. 3.

HALT. — As each division completes its wheel the word *Halt* will be given by its own officer.

FRONT. — And at the word FRONT which will also be given to each division by its own officer, the *right about wheel* by *Four* will be repeated, which will complete the formation. Odd files moving out as taught. Fig. 4.

LEFT DRESS. — As already taught.

EYES FRONT. — After giving the word EYES FRONT, each officer will take his place on the left, or pivot flank of his division.

Column of subdivisions is formed on the same principle, the officers taking command of the leading subdivision of

their respective divisions, and serjeants the others as already explained.

Another and simpler mode of breaking into column without encroaching upon the front of a line, if there is room on the flank to do so, is to RETIRE BY FOURS FROM THE RIGHT OF DIVISIONS. LEADING FOURS RIGHT ABOUT WHEEL. Remaining FOURS RIGHT WHEEL, MARCH. As the last *four* of each division makes its second wheel to the right on the spot from whence the leading *four* retired, followed by the other fours in succession, the officer of the division will give the word *halt;* he will then give the word *front,* which is done by *fours, left wheel,* and the division will be in column right in front.

In like manner column left in front may be formed by retiring by *fours* from the left of divisions.

In taking ground to either flank in column, officers or leaders of divisions or subdivisions must be very careful in keeping correct covering and distances, so that if suddenly halted and wheeled into line, each division or subdivision shall just have room to fit into its place, without any gaps or crowding; and if the troop comes into correct line with the other troops it will prove that the covering on the pivot flanks has been attended to.

Retiring in Line.

A Squadron or Troop may retire in Line by the right-about wheel of Fours, and thus inverted, the word of command is RETIRE, by the Right, Left, or Centre. WALK, MARCH–HALT–FRONT. At the word Front, the wheel about of Fours will restore the Line to its proper order. Odd files move out as already explained.

The troop is now ready to move in line or in column of divisions or subdivisions, fours, or twos in any direction. The officers and serjeants know their places and duties in any movement that a corps of irregular cavalry is ever likely to be called upon to perform.

Corps of this description, although as yet but few, may increase with the development of any practical system of usefulness. That they should work in large bodies as cavalry is not contemplated, but the foregoing drill can be applied to two or more troops in squadron or as a regiment, in which case drill instructors and guides may act as markers.

PLATE XVII.

Fig. 1.

PREPARE TO DISMOUNT.
RIGHT FILES ONE HORSE'S LENGTH—
MARCH.

DISMOUNT.

Fig. 2.

PREPARE TO SKIRMISH, RIGHT FILES ONE HORSE'S LENGTH—MARCH.

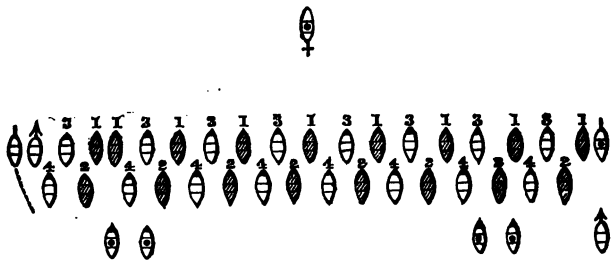
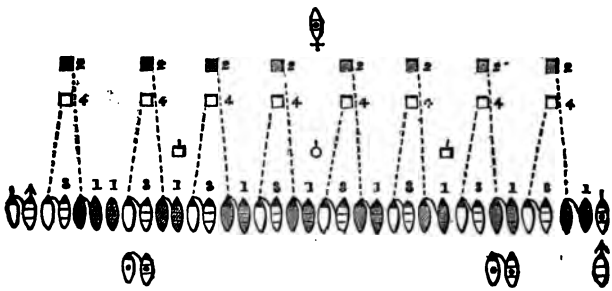


Fig. 3.

LEFT FILES SKIRMISH, PREPARE TO DISMOUNT, DISMOUNT.



Section 4.

DISMOUNTING TO SKIRMISH.

The right and left files of each four should always work together; when the left files dismount to skirmish the right files will hold their horses, and *vice versâ*.

1. *Dismounting.*—Plate XVII., fig. 1.

PREPARE TO DISMOUNT. RIGHT FILES. ONE HORSE-LENGTH. MARCH.

On the word MARCH, the right files will move their horses forward one horse's length; the left files remaining still.

DISMOUNT.

The men are now placed in the proper position for dismounting, which will be done on the word DISMOUNT.

PREPARE TO MOUNT, MOUNT.

As already taught.

FRONT FORM. RANK ENTIRE.

On this word the left files will move up into the intervals between the right files, and will dress by the right.

2. *Skirmishers Dismounting.*

PREPARE TO SKIRMISH. RIGHT FILES. ONE HORSE'S LENGTH. MARCH.

On the word MARCH the files named will move their horses forward, as shown in Plate XVII., fig. 2.

LEFT FILES, SKIRMISH. PREPARE TO DISMOUNT. DISMOUNT.

On the word DISMOUNT, the left files front and rear rank, will dismount, lead, their horses up into rank entire, and give their bridles to the right files, they will then move out twelve paces in front of the horses, each rear-rank man covering his front-rank man. The files thus formed will wait for orders. Plate XVII., fig. 3.

In like manner the left files may be ordered to advance one horse's length, and the right files to dismount to skirmish. Either the right or the left files may be ordered to skirmish.

The senior subaltern officer will command the right files

when dismounted to fire; the junior will command the left files when dismounted to fire, except when extended and skirmishing by FOURS, when each officer commands his own division.—*See* Part VIII.

One (or more) serjeants will dismount with the skirmishing party. Any blank files may be occupied in holding the horse of an officer or serjeant. One guide should always be with the horses, the other, if not required to lead a horse, may act as a connecting link between the skirmishers and the mounted men.

A troop on moving along a lane or narrow road in twos may be halted, and the right or left files may be ordered to dismount at once without forming up; this method will frequently be found the most convenient. As a general rule it will be advisable to dismount the reverse flank files, as, in the event of a retreat, the front will be reversed, and time will be saved on remounting.

3. *Skirmishers Mounting.*

SKIRMISHERS TO YOUR HORSES. DOUBLE.

On the word DOUBLE, the skirmishers will run back to their horses, and lay hold of their bridles with both hands, standing in front of their horses' heads.

RIGHT (or LEFT) FILES ONE HORSE'S LENGTH. MARCH. PREPARE TO MOUNT. MOUNT.

The mounted men will then be ordered to advance one horse's length, and on the words PREPARE TO MOUNT, the skirmishers will throw the reins over their horses' heads, move to their horses' sides, and place their left feet in the stirrups. On the word MOUNT they will mount.

FRONT, FORM RANK ENTIRE.

As already described.

If the skirmishers run back to their horses, while the mounted men are taking ground to the flank in a narrow lane, the horses should be halted as they are. If the led horses are on the pivot flank, the skirmishers mount at once. If the led horses are on the reverse flank, the mounted men wheel about; to the left, if the led horses are on the right; to the right, if the led horses are on the left.

PLATE XVIII.

Fig: 2.

Fig: 1.

Fig: 3.

PART VII.

NAMAQUA BUCKET DRILL.

Introductory Remarks.

The plan of carrying the rifle in the Namaqua bucket has stood the test of three years' experience in the corps which the compiler commands.

Mr. Galton's description of the "Namaqua" bucket is adhered to, with the exception of the ring in the pummel of the saddle, which gives the rifle too much play, unless braced up so tight as to be liable to chafe the horse's shoulder. This objection is obviated by two Ds, Fig. 3, A,B, on the inner side of the bucket, from which one strap B suspends the bucket to the stirrup leather *bar* under the stirrup leather. The other strap A, passes through the staple, which is on every hunting saddle; the bucket then rests on the saddle-flap nearly in the position of a holster and clear of the horse's shoulder.

The *bar* supports the rifle, the second strap A checks its play, and is a safeguard against such accidents as might happen from a single strap breaking, and the rifle falling under the horse's belly and hanging from the girth at Fig. 1, C.

The buckets are made for breech-loading rifles, and the flap which buttons round the barrel is intended to protect the sight, Fig. 1, A,B.

A waterproof cover like an umbrella case made to slip over the muzzle, and lock, drawn with a cord at the small of the butt, will protect the rifle from rain. Such a case can be slipped under the waist belt whilst skirmishing, or in settled weather can be carried under the cloak straps.

Right arms may at first be bruised from rifles having too much play, but this only verifies Mr. Galton's remark, that "the exact adjustment may not be hit upon for some little time."

Those who give due attention to the adjustment of the bucket are exempt from inconvenience.

Another merit in the "Namaqua Bucket" is that the risk of becoming disabled by a fall with the rifle attached to the person is avoided.

Drill for Mounted Riflemen using the "Namaqua" Bucket.

WITH ARMS PREPARE TO DISMOUNT. At the caution unbutton the flap Fig. 1, A.

DISMOUNT.

One.—Pass the right arm between the rifle and the body, grasp the piece with the right hand between the lower band and the lock, Fig. 2, A.

Two.—Lift the rifle from the bucket, pass the piece into the left hand, which is to be in the position of "prepare to dismount."

Three.—Dismount in the usual way, retaining the rifle at the *trail* in the left hand.

PREPARE TO MOUNT. As directed in sec. 2, page 56, holding the rifle in the left hand.

MOUNT.

One.—In the usual way.

Two.—When in the saddle take the rifle into the right hand, holding it between the lower band and the lock, muzzle upwards, hammer to the front, and drop it gently into the bucket.

Three.—Draw the right arm between the rifle and the body, pass the elbow over the piece, and drop the right hand by the thigh.

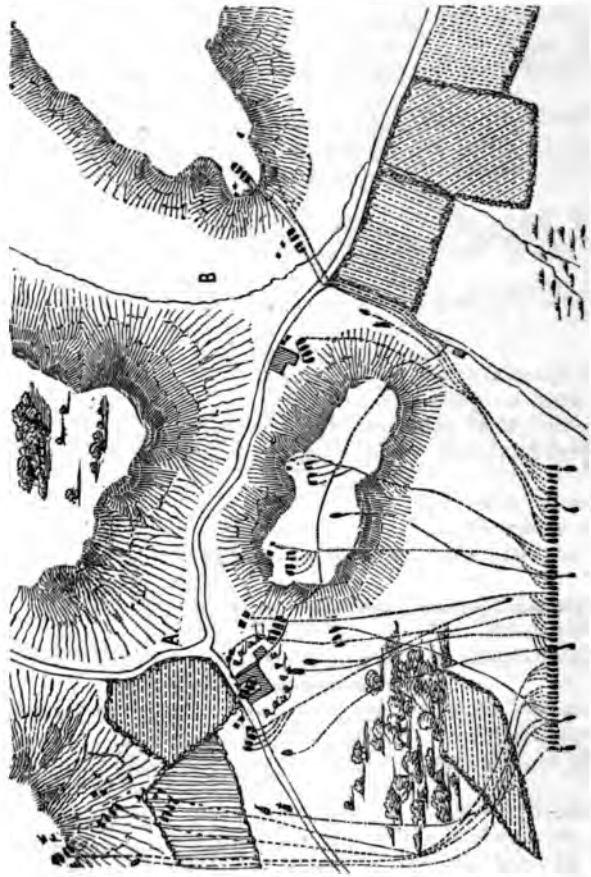
SECURE ARMS. With the right hand pass the flap of the bucket Fig. 2, B, round the barrel, button the tongue, Fig. 1, A, and drop the right hand by the thigh.

Note.—It is not necessary to "secure arms" on every occasion of mounting; the flap may remain open during evolutions where dismounting has to be repeated at short intervals, as in skirmishing.

RIGHT OR LEFT FILES, PREPARE TO SKIRMISH. At the caution PREPARE TO SKIRMISH, unbutton the flap of the bucket with the right hand, placing the left hand in the position of PREPARE TO DISMOUNT, ready to receive the rifle, hammer to the front, and muzzle pointing upwards to the right rear.

PLATE XIX.

A TROOP EXTENDED TO COMMAND ROAD A. AND VALLEY B.



DISMOUNT. Dismount as already explained, retaining the rifle in the left hand at the *trail*, lead horse up into rank entire, giving the bridoon rein to the mounted file in the usual way. Move out twelve paces to the front, CHANGE ARMS, ORDER ARMS, and HOOK UP SWORDS.

LOAD. Load in the usual way.

CEASE FIRING. Mounted riflemen should use muzzle-loaders with great caution, and never carry loaded rifles on horseback. Officers commanding skirmishers, aided by their non-commissioned officers, should anticipate the CEASE FIRING by a caution to the rank which last fired not to load again. Thus when the next or loaded rank fires, the sound or order to CEASE FIRING will have the desired effect of empty rifles in both ranks. It being a rule in mounted rifle corps not to load after the order to CEASE FIRING.

Note.—This may seem a difficult precaution to enforce, and hence the importance of arming mounted riflemen with "breech-loaders."

PART VIII.

EXTENDING AND SKIRMISHING BY FOURS.

Introductory Remarks.

The object of extending by *Fours* mounted instead of as infantry, is to expand the line of fire, change position, and vary the direction of attack with a rapidity calculated to confuse an enemy.

The enclosures and undulations of England afford plenty of cover for small, scattered, restless, unseen groups, whose rifles possess penetrative power to disable artillery horses at 1,000 yards. Plate XIX.

A troop acting by themselves may extend one half as skirmishers, supported by the other half in its cavalry

capacity, or may co-operate with other troops of whatever arm.

In positions secure from surprise by an enemy's cavalry the whole troop may extend in one line of skirmishers, or by divisions in echellon, as may be required.

This may seem a hazardous practice, but I do not separate the rider from his horse further than the few paces necessary for him to see the object of his fire; and I find that a smart man can, from the word CEASE FIRING get back 12 paces to his horse, mount, drop his rifle into the bucket, and draw his sword in 30 seconds.

The close to either flank or centre could be done as fast as the enemy's approach, and the latter coming up with their horses blown, would, if not in very superior numbers, perhaps find their match at close quarters.

Or if more prudent to recede from the attack, the enemy could be kept at a disadvantage by our volunteers retiring over a fence or two and resuming their fire before their discomfited pursuers could come up with them or get out of range, for I find that even with a muzzle loader a smart man can, from the word SKIRMISH, lift his rifle out of the bucket, dismount, lead up into rank entire, move out 12 paces to the front, load, adjust his sight, and come to the READY in 50 seconds, and can deliver three rounds in two minutes and a half, so that in either case the assailant would probably be foiled.

Extending by Fours.

Select an intelligent man as the leading file (No. 1) of each *Four*.

Tell off by *Fours* and prove in the manner laid down, page 11.

The leading files of *Fours* then number off their respective *Fours* from right to left of divisions, 1, 2, 3, 4, 5, 6.

For example, if there are 48 in the rank, there are six *Fours* in each division. But if the rank is not divisible by 4, say 47, the odd files next to the *Four* on the left of the left division are blank, and the numbering runs thus: —

Left.	Right.
6, 0, 4, 3, 2, 1.	6, 5, 4, 3, 2, 1.

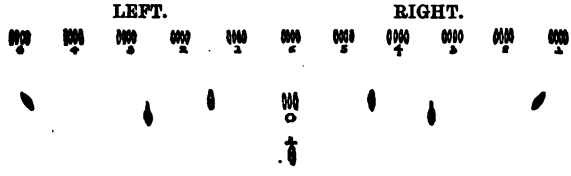
The right division is in this case the stronger, and is so more frequently than not; its left *Four* (No. 6) works as

the centre of the troop. But when the right division is detached and odd files occur, their place will be next to the *Four* on the left of their own division. When the troop "extends," the odd files take post 50 yards, or such distance as may be ordered, in rear of the centre, and are ready to replace casualties in any direction. The same rule applies to divisions. When the troop "closes," the odd files resume their place in the rank.

The limits of extension must be left to circumstances and the discretion of the commanding officer.

A rank of 47 files extended by *Fours* to intervals of 50 to 100 yards would cover from 500 to 1,000 yards.

The position of the subaltern officers of a troop extended is *moving* in rear of their respective divisions, that of the serjeants is (*moving*) in rear of their respective subdivisions, those of the *first* and *fourth* subdivisions keeping a look out on the flanks.



The captain's position is *moving* throughout the line, with the trumpeter in attendance, the guides either serving in the rank or employed as circumstances may require. Communication is thus complete, and orders can pass by word or gesture without any bugling or noise.

In advancing, *Fours* move abreast except when obstacles require the front to be reduced.

In retiring, horses come away move readily in pairs than singly, it is therefore expedient to retire by twos.

When extended by *Fours* the leading file commands his comrades, and may deviate somewhat from precise dressing for the sake of any available cover.

In extending from right to left, Nos. 1 being the pivot, keep the direction and covering, Nos. 4 look out for the distance, upon the same principle as front and rear rank men in dismounted drill, page 31. And in extending from left to right, Nos. 4 keep the direction and covering, Nos. 1 looking to the distance.

A few examples will illustrate the system, which is very simple and easily learned.

BY FOURS FROM THE RIGHT TO 50 YARDS EXTEND, WALK, TROT, or GALLOP. MARCH.

If from the *Halt*, *Four* No. 1 of the right division stands fast (or moves up two horses' lengths, according to the nature of the ground), the remaining *Fours* wheel to the left, and move off at the pace ordered.

On approaching the distance, file No. 4 gives the word LEFT INCLINE, which takes his party sufficiently to the rear of the alignment to admit of wheeling up and dressing, and when opposite his front he gives the word RIGHT WHEEL, HALT.

If *Four* No. 1 moves up two horses' lengths, the incline of the remaining *Fours* before wheeling is unnecessary.

BY FOURS FROM THE LEFT TO 100 YARDS EXTEND, WALK, TROT, or GALLOP. MARCH.

Four No. 6 of the left division stands fast (or moves up two horses' lengths), the remaining *Fours* wheel to the right, files Nos. 4 keeping the direction and covering, files Nos. 1 judging the distance, and giving the words RIGHT INCLINE, LEFT WHEEL, HALT, or dispensing with the "incline," as explained in the foregoing example.

BY FOURS FROM THE CENTRE TO 70 YARDS EXTEND, WALK, TROT, or GALLOP. MARCH.

Four No. 6 of the right division stands fast, or moves up two horses' lengths, the remaining *Fours* wheel outwards at the pace ordered, the pivot files keeping the covering, the reverse flank files judging the distance, and wheeling their respective *Fours* in succession into the alignment as explained in the foregoing examples.

In each case the odd files take post in rear of the centre at the pace ordered for the movement, file No. 1 being the leader of the party.

To extend on the move, the *Four* named continues to advance without change of pace, the remaining *Fours* by *Twos* from the right, spring into a trot from the walk, or gallop from the trot, each *Four* being under the guidance of its (No. 1) leading file, who on approaching his point

gives the word FRONT FORM, and the original pace is resumed.

The extend on the move from the centre, for instance, would be effected thus:

Note.—On parade this movement can be done by *Fours* "inclining" or graduating their wheel outwards according to position and the distance to be passed. But on service broken ground and enclosures must be got over, and in working by *Twos* the leading file can see his way better; his duty being to get to his point as he best can.

CHANGE FRONT TO THE RIGHT ON THE CENTRE, WALK, TROT, or GALLOP, MARCH.

Four No. 6 of the right division (being the centre) wheels a quarter circle to the right.

The *Fours* of the left division "incline" into their places in the new alignment at the pace ordered, preserving their proper intervals from the right, the leading file giving the word "halt" in time to give room for dressing.

The remaining *Fours* of the right division retire by twos from the right of *Fours*, and on passing two horses' lengths to the rear of the new alignment, the leading file gives the word RIGHT ABOUT FORM.

CHANGE FRONT TO THE LEFT ON THE CENTRE, WALK, TROT, or GALLOP. MARCH.

The *Four* No. 6 of the right division (being the centre) wheels a quarter circle to the left, the remaining *Fours* of the right division "incline" at the pace ordered, Files No. 4 preserving their proper intervals from the centre, the leading files (No. 1) giving the word HALT in time to give room to dress up. The left division retires by *Twos* from the left of *Fours*, and on passing two horses' lengths to the rear of the new alignment, the leading file gives the word LEFT ABOUT FORM.

CHANGE FRONT HALF RIGHT, or HALF LEFT, ON *FOUR* NO. — OF — DIVISION.

The *Four* named wheels the eighth of a circle to the right or left, the remaining *Fours* move into the new alignment, as above explained.

CHANGE FRONT RIGHT BACK ON FOUR No. 6 OF THE LEFT DIVISION. WALK, TROT, or GALLOP. MARCH.

The *Four* named wheels a quarter circle to the right, the remaining *Fours* retire by *Twos* from the right of *Fours* at the pace ordered, and passing two horses' lengths to the rear of the new alignment, the leading files give the word **RIGHT ABOUT FORM.**

CHANGE FRONT LEFT HALF BACK ON FOUR No. 3 OF THE RIGHT DIVISION. WALK, TROT, or GALLOP. MARCH.

The *Four* named wheels an eighth of a circle to the left, *Fours* No. 1, 2 of the right division "incline." The remaining *Fours* retire by twos from the left into the new alignment, as already explained.

CHANGE FRONT TO THE REAR ON THE CENTRE— WALK, TROT, or GALLOP. MARCH.

Four No. 6 of the right subdivision (being the centre) wheels *right about*, the remaining *Fours* wheel inwards, and at the pace ordered pass by the rear* (meeting bridle hand to bridle hand), and wheel in succession into the new alignment.

The foregoing examples will explain the system of extending by *Fours* and changing position in any direction.

The opening fire is regulated by the commanding officer, by simply giving the word **RIGHT** or **LEFT FILES SKIRMISH**, when the files named at once dismount, move forward 12 paces, or according to the nature of the ground, load and fire.

If the commanding officer combines the order to skirmish with the order for any movement, the files named dismount without further orders, and open fire at once.

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* Viz., the original front.

A SUBDIVISION LINKED WITH LOOK OUT AND "*FOUR*" TAKING GROUND TO THE RIGHT ON A SIGNAL.

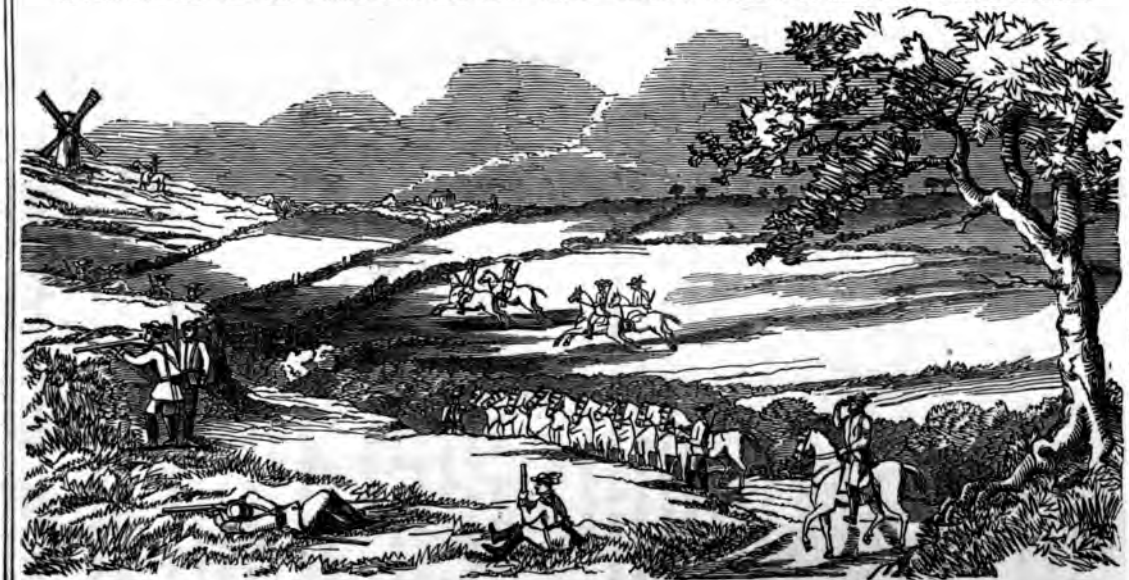


PLATE XX.

In such case the caution would be—

BY FOURS FROM THE CENTRE—100 YARDS EXTEND, AND RIGHT FILES SKIRMISH.

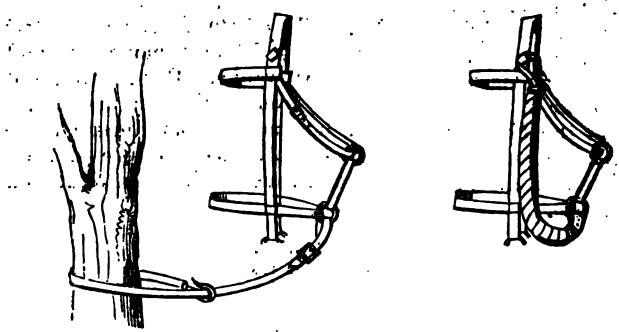
The right files dismount, load, and commence firing at once.

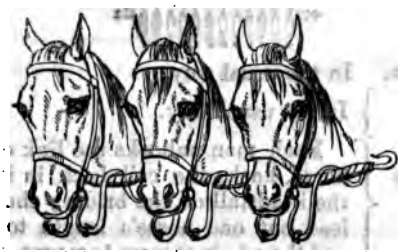
If the line is on the move, the word RIGHT or LEFT FILES SKIRMISH brings the whole to the "halt," and the files dismount and open fire without further orders.

In positions secure from surprise, extended *Fours* may double their fire, by all dismounting and hooking their horses to bushes, gates, or trees.

A troop may also increase its fire by "linking" the horses in subdivisions of from eight to twelve. (*See* Plate XX.)

The bridle used for these purposes only requires a stout throat lash and noseband to bear the strain of the spare rein by which when uncoiled a horse may be fastened to anything, or in coil serves as the "link."





Linking is managed thus :—

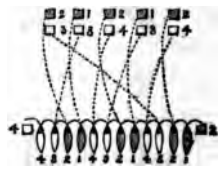
PREPARE TO DISMOUNT. } In the usual way.

DISMOUNT. Do. do.

LEFT FILES FORM UP. MARCH. } The left files lead up into rank entire.

LINK HORSES. { Each man stands in front of his horse, his rifle in his left hand, and with his right hand he unhooks the collar coil, drops it between and passes it under his own reins and under the reins of the horse on his right (*proper left*), and places the hook in the collar ring of the said horse. The flank men stand fast, and hold their own horses, the others being linked to them cannot move. The remaining dismounted men of the subdivision move out 12 paces to the front and at intervals of four yards, in two ranks "order arms."

For instance, in a subdivision of 12, No. 1 file of the *Four* on the right, and No. 4 file of the *Four* on the left hold the horses. The remaining 10 men move out and take their places as front and rear ranks. But No. 3 file of the *Four* on the right has no front-rank man, and No. 2 file of the *Four* on the left has no rear-rank man ; these two odd files (in their respective *Fours*) therefore join on the left of the subdivision, and thus 10 rifles out of 12 can open fire.



CEASE FIRING. In the usual way.

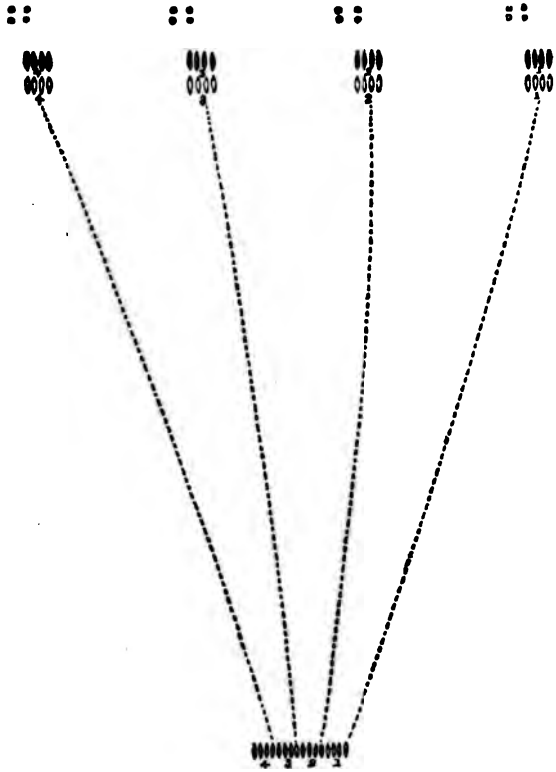
TO YOUR HORSES. } In the usual way.

PREPARE TO MOUNT. MOUNT. { Each man unhooks the link of his own horse, hooks the coil back in its place on the headstall of the bridle ; the right files lead out one horse's length to the front, and the whole prepare to mount, and mount.

PLATE XXI.

RIGHT DIVISION EXTENDED.

SKIRMISHERS REINFORCED BY THE SUPPORT.



LEFT DIVISION SUPPORTS.

DOUBLE FOURS LINKED IN EXTENDED ORDER.

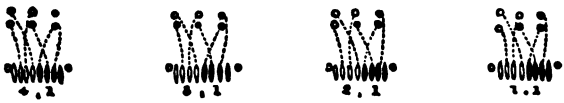
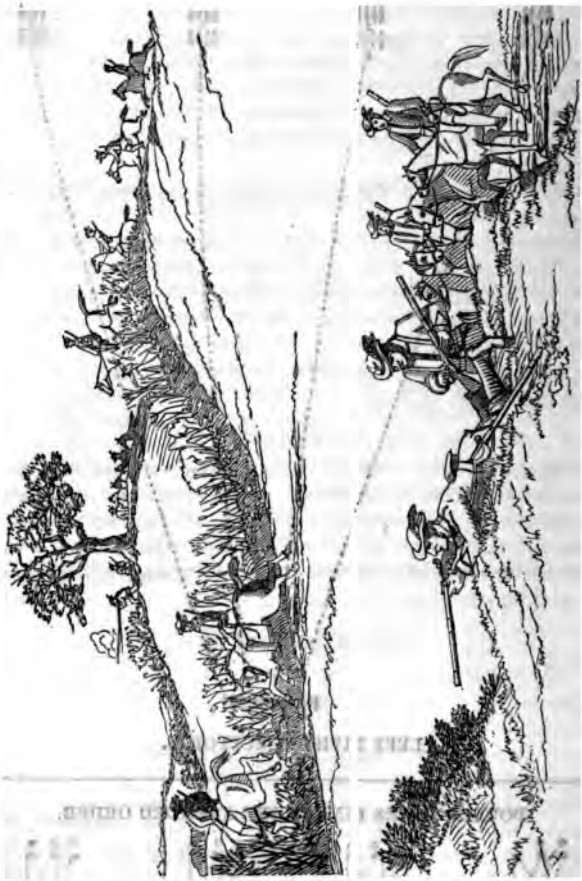


PLATE XXII.

REINFORCING SKIRMISHERS.



Reinforcing Skirmishers.

To reinforce an extended line of *Fours*, extend the support, corresponding Nos. of *Fours* joining, and becoming *Double Fours*. Plates XXI., XXII.

In this case, if the right division is skirmishing and the left division is in support, the latter will be extended to the same intervals as the corresponding *Fours* of the former; and on arriving at the skirmishing points the files named will dismount in rear of the horses of the right division, and will skirmish on the left of the dismounted files of that division.

Or, *vice versâ*, if the left division is in front, and is to be reinforced by the right.

Mounted men familiar with localities may often have it in their power to occupy commanding positions, when *Double Fours* extended may by linking their horses increase their proportion of fire from one half to three-fourths; and the double supernumerary rank arising from this union of divisions will afford a proportionate security against surprise. Fig. 2. Plate XXI.

Retiring.

An extended line of *Double Fours* may retire simultaneously by *Twos* from the right of eights, or in alternate divisions by *Twos* from the right of *Fours*, and can be closed by divisions to either flank at pleasure, springing from *Twos* to *Fours* in the close, halt inverted, and front by the right-about wheel of *Fours*.

Relieving Skirmishers.

When skirmishers have suffered loss, or their supply of ammunition is getting low, it will be advisable to relieve them, and this object is attained by the same process as that of reinforcement, the relieved men retiring by twos from the right of *Fours* in the usual way, on the relieving men taking their places; the relieved division forming in rear, and becoming the support, unless that post has been supplied from the reserve, in which case the relieved division will join the reserve.

PART IX.

SWORD EXERCISE.

1. Cuts—Guards—Points.

The Volunteer should now be given a sword and made acquainted with the strong and weak parts of it; the "Fort" (strong) being the half of the blade near the hilt, the "Feeble" (weak) the half towards the point; indeed, a knowledge of these distinctions is very material either in giving or guarding a Cut, as much depends upon their proper application. From the hilt upwards, in opposing the blade of an adversary, the strength of the defence decreases in proportion as the Cut is received towards the point: and *vice versâ*, it increases from the point downwards. The same grasp of the Sword is to be retained throughout the exercise, to ensure the true edge leading, the middle knuckles are to be in the direction of the edge in all cuts and guards, the grip of the handle being held by the thumb and fingers around it.

Prepare for Sword Exercise.—Carry the right foot out to the right eighteen inches, the left hand slightly closed a little below the pit of the stomach, being on the same line with the elbow, which will be nearly its height when holding the reins.

Draw Swords.—Bring the hand smartly across the body over the bridle arm to the "sword knot," place it upon the wrist, and give the hand a couple of turns inwards, in order to make it fast, and as the handle is grasped, turn the hilt to the rear, and raise the hand the height of the elbow, the arm being close to the body; by a second motion draw the sword from the scabbard to full extent of the arm, the edge being to the rear, and sink the hand until the hilt is under the chin, the blade perpendicular, the edge to the left, and elbow close to the body, which forms the position

of "Recover Swords," then by a third motion bring the hilt down in line with the bridle hand, the elbow near the body, the blade perpendicular, the wrist slightly rounded inwards, which brings it to the position of "Carry Swords."

Slope Swords.—Loosen the grasp of the handle, and let the back of the sword fall lightly on the shoulder, the arm remaining in the previous position, but the wrist a little bent upwards.

Right prove distance.—Bring the sword to the "Recover;" by a second motion extend the arm to the right, and lower the sword in a horizontal direction from the shoulder with the edge to the rear, and the shoulders square to the front. "Slope Swords."

Front prove distance.—Raise the sword as before; by a second motion extend the arm to the front, and lower the sword in a horizontal direction, edge to the right. "Slope Swords."

Note.—Proving distance to the front is only necessary when on foot.

Carry Swords.—By a motion of the wrist and fingers resume the grasp of the hand so as to bring the blade upright as before.

Return Swords.—Carry the hilt to the hollow of the left shoulder (the blade being kept perpendicular, and the back of the hand to the front), then, by a quick turn of the wrist, drop the point into the scabbard, and resume the first motion in "Draw Swords;" by a second motion let the sword fall smoothly from the hand, at the same time loosening the sword knot from the wrist; by a last motion come smartly to the position of "Attention."

Preparatory Instructions in Numbers.

Engage.—Carry the sword to the right front, the edge inclining to the right, the point being advanced, and the arm bent, with the back of the hand up, and wrist down; the sword is then to be carried round in the same position to right rear and passed smartly to left rear by the front, the point down, the "Fort" covering the centre of the body, elbow raised, hand a little lower than the elbow,

looking over the arm and sword; continue this guard to left front, and resume "Right Front Guard."

Assault.—Raise the hand and sword to right rear, the arm bent, and edge slightly turned up, the blade over the right shoulder, the body and head turned to the right.

One.—Cut horizontally from rear to front at Cavalry, and prepare for Cut "Two," the sword resting on the left shoulder, edge to the front, with elbow raised.

Two.—Cut horizontally from front to rear at Cavalry, and prepare for Cut "Three," the arm extended to the rear on a line with the shoulder, the back of the hand turned down.

Three.—Cut low from rear to front at Infantry, and prepare for Cut "Four," the back of the sword resting on the left shoulder, point to the rear, shoulders square to the front, and body well bent over.

Four.—Cut low from front to rear at Infantry, and prepare for Cut "One" on the left at Cavalry by turning the head and body to the left, sword resting on the right shoulder; hand to the right front, arm bent.

One.—Cut horizontally from front to rear at Cavalry, and prepare for Cut "Two," the sword resting on the left shoulder, edge to the rear, hand to the left, elbow raised as high as the shoulder, arm bent.

Two.—Cut horizontally from rear to front at Cavalry, and prepare for Cut "Three" at Infantry, arm bent, hand over the right shoulder, sword point downwards, and bend the body over to the left.

Three.—Cut low from front to rear, and prepare for Cut "Four," the arm extended to left rear, back of the hand up, edge of the sword down, point downwards to the left rear.

Four.—Cut low from rear to front at Infantry, and "Slope Swords."

Note.—If the volunteer fails to carry the edge well in making the "Assault," to attain so essential a requisite for a swordsman, he should be practised in combining the Cuts "One" and "Two" at Cavalry, repeating them several times; also the Cuts "Three" and "Four" at Infantry.

Right Defend.—The hand and elbow well raised to cover the head, the edge of the sword up, the point lowered to the right front.

Second.—Carry the hand to the right rear, the sword nearly perpendicular, point up, the "Fort" covering head and neck.

Third.—Lower the point to right front, with the edge to the front, the back of the hand to the left, the arm slightly bent, the hand as low as the hip to defend the leg or horse's shoulder.

Fourth.—Turn the edge of the sword to the rear, arm slightly bent, as high as in "Third Guard."

Left Defend.—Carry the sword by the front smartly to left rear, the "Fort" covering head and neck, point downwards, looking under the arm,

Second.—Carry the sword to the left front, the "Fort" covering face and neck, looking under the arm, body square to the front.

Third.—Lower the hand to the left rear the height of the hip, point downwards, and edge inclining to the rear, back of the hand kept up, arm slightly bent to defend the leg.

Fourth.—Turn the edge of the sword and arm to the front, hand as high as the hip, point downwards, to the left front, arm slightly bent to defend the leg or horse's shoulder.

Slope Swords.

Words of Command.

"Right Engage"		"Right Defend"
"Assault"		"Second"
"One"	Right.	"Third"
"Two"		"Fourth"
"Three"		
"Four"		
"One"	Left.	"Left Defend"
"Two"		"Second"
"Three"		"Third"
"Four"		"Fourth"
"Slope Swords"		"Slope Swords."

Guards and Points.

Right Defend.—Form first guard on the right.

Point.—Deliver point with the back of the hand up to the right front at Cavalry, to full extent of the arm, and return to first guard.

Second.—Form second guard.

Point.—Deliver point at Cavalry, back of the hand up to right rear, and return to second guard.

Third.—Form third guard.

Point.—Deliver point at Infantry, back of the hand up to right front, and return to third guard.

Fourth.—Form fourth guard.

Point.—Deliver point at Infantry, back of the hand up, to right rear, and return to fourth guard.

Left Defend.—Form first guard.

Point.—Deliver point to left rear at Cavalry, and return to first guard.

Second.—Form second guard.

Point.—Deliver point to left front at Cavalry, and return to second guard.

Third.—Form third guard.

Point.—Deliver point to left rear at Infantry, and return to third guard.

Fourth.—Form fourth guard.

Point.—Deliver point to left front at Infantry, and return to fourth guard.

Slope Swords.

Words of Command.

"Guards" and "Points"		
"Right"	"Defend"	"Point"
	"Second"	"Point"
	"Third"	"Point"
	"Fourth"	"Point"
"Left"	"Defend"	"Point"
	"Second"	"Point"
	"Third"	"Point"
	"Fourth"	"Point"

"Slope Swords."

Sword Exercise.

Right Engage—Assault.—Prepare for Cut "One" on the right at Cavalry.

One.—Cut "One," and form first guard.

Point.—Deliver point and prepare for Cut "Two."

Two.—Cut "Two," and form second guard.

Point.—Deliver point and prepare for Cut "Three."

Three.—Cut "Three," and form third guard.
Point.—Deliver point and prepare for Cut "Four."
Four.—Cut "Four," and form fourth guard.
Point.—Deliver point and resume fourth guard.
Left Engage—Assault.—The same words of command as on the right.
Slope Swords.

Words of Command.

"Sword Exercise"

"Right Engage"	"Left Engage"
"Assault"	"Assault"
"One—Point"	"One Point"
"Two—Point"	"Two—Point"
"Three—Point"	"Three—Point"
"Four—Point"	"Four—Point"

"Slope Swords."

Pursuing Practice.

Assault.—Prepare for Cut "One" on the right front.
One.—Make Cuts "One" and "Two" in quick succession at Cavalry, and prepare for point to right front, the hand in front of the shoulder, elbow well raised, back of the hand up.
Point.—Deliver point to full extent of the arm to right front, immediately turn the back of the hand down, head and body turned to the left front, arm a little bent, point of the sword inclined to the rear for Cut "One" at Cavalry on the left.
One.—Make Cuts "One" and "Two" in quick succession at Cavalry, and prepare for point to left front as for right front.
Point.—Deliver point to full extent of the arm to left front, and prepare for Cut "Three" on the right at Infantry.
Three.—Make Cuts "Three" and "Four" on the right in quick succession at Infantry, and prepare to point to the right front, elbow well raised, and hand a little below the shoulder.
Point.—Deliver the point to the full extent of the arm, and prepare for Cut "Three" on the left.

Three.—Make Cuts "Three" and "Four" in quick succession at Infantry, and prepare to point to the left front as on the right front.

Point.—Deliver point to full extent of the arm, and remain steady.

Slope Swords.

Words of Command.

"Pursuing Practice"
"Assault"
"One"—"Point" - - - Right.
"One"—"Point" - - - Left.
"Three"—"Point" - - - Right.
"Three"—"Point" - - - Left.
"Slope Swords."

The men being complete in the Sword Exercise by word of command, will now go regularly through the exercise in the same manner as it will be shown at reviews, inspections, &c., taking the time of each motion (according as Right or Left is attached to the words of command).

Words of Command.

"Right Prove Distance."
"Slope Swords."
"Front Prove Distance."
"Slope Swords."
"Sword Exercise."
"Pursuing Practice."

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2. General Observations and Directions.

The exercise of the Sword consists of Four Cuts or directions of the edge; the same number of Guards or defensive positions; and the point (or Thrust) given with the nails downwards; therefore, whatever may be the attack or defence, it can only be formed by having recourse to some of the above movements, or a combination of them, as they are all applicable either to Cavalry or Infantry, according to the situation of the parties engaged; and in all attacks, whether Cuts or Thrusts, the motion ought to increase in speed, the impetus being given at the last.

The greatest attention should at all times be paid to maintain the proper position and balance of the body, from which, by too great an exertion in delivering a Cut or Thrust, the horseman may be suddenly thrown, and thereby lose the advantage of his science in the use of his Sword, by the natural efforts which he must make to regain his seat; nor should he fail to have every confidence and dependence upon his Guard, without trusting to his avoiding the attack of an opponent by turning or drawing back the body to escape from it.

In delivering a forward Thrust, very little force is necessary when the horse is in quick motion, as the extension of the arm, with a good direction of the point, will be fully sufficient; nor should a Cut, under such circumstances, be given too strong, as in both cases the impetus of the horse will give the effective force; or in the latter, the drawing of the edge can very frequently be applied with advantage, particularly where the Point, by being given too soon, may not have taken effect, when by a quick turn of the wrist the edge is drawn along the face of your opponent, or any part which more immediately comes in contact with it. The forcing also of the edge can be resorted to when very near and closely pressed upon by an adversary, by suddenly extending the arm, and directing the edge across the face, or where an opening is given; in this case, however, the hand should not be carried more than absolutely requisite either to the Right or Left, or make too wide a movement, so as to offer an equal chance to your opponent.

When sufficient space is allowed for choosing the point of attack, you should endeavour to take advantage of it; if not, at all events to avoid its being made on your Left rear, when a change of position can alone bring you upon an equality with your opponent: it may be done either by making a sudden halt, so as to allow him to pass, and then pressing upon his Left rear; or by turning quickly to the Left about, and thereby having your Right also opposed to his. Should you be prevented doing this, and he still keeps on your Left, you must bear up, as close as possible to him, otherwise your opposition will be ineffectual; for in his situation, by keeping at the proper distance from you, his Cut will reach when yours will not, and consequently you will be reduced to the defence alone.

In meeting your opponent on the Left front, turn sharply to the left on your own ground, which brings you immediately with your sword-arm free, and at liberty to act upon his left; and in meeting him upon the Right front, press your horse quickly on, and by a sharp turn to the right, gain his left rear; or if pursued, endeavour to keep your Adversary on the Right rear; when the distance will be always in your favour, and you may, by the Rear Cut and Point, keep checking his advance with impunity. When attacked by more than one, you will naturally endeavour to keep them both either to the Right or Left; but where they have been enabled to place themselves on both sides, press close upon the left opponent, and endeavour to keep the right one at a distance.

Although a regular mode is laid down for drawing the sword, yet occasional practice should be given, both on Foot and on Horseback, to come to the "Guard" immediately, and at any required point, without going through the Parade Motions, &c., which will prepare the Swordsman for any sudden attack of an enemy.

The attack or defence against the Lance must depend greatly upon the Rider; for admitting that the Lancer is equally well-mounted, and skilful in the management of his horse, he will endeavour to keep at such distance as to be out of your reach, whilst he can easily make good his thrust, from the length of his lance; and he will very frequently succeed in directing his point at your horse, which, becoming unruly, will leave you exposed to the attack of your opponent. You must, therefore, invariably endeavour to gain his Right rear, where he is less able to attack or defend; whereas if (as against the Sabre) the attack is made upon his Left rear, he has the advantage of resting his lance upon his bridle arm, and can lengthen or shorten his thrust with facility and quickness. If engaged on his Left, the object must be to keep just out of distance of the lance; watching the opportunity to close, either by having previously formed a defence, or by bearing the lance out of the line. When meeting on his, or your own, Right front, you may have recourse to either of the "Three Practices" (as against the Sword), closing instantly after any of them with confidence and resolution; he will not then attempt to aim at the horse, as he becomes exposed to any Cut or Thrust, for it is only when engaged directly Right or Left in circling

that he gives his short stabs at the horse, without exposing himself, or losing the power of regaining his lance. Your horse should have been well accustomed to the waving of the lance, without which no skill of yours, either in the science of the sword or that of riding, can be of much service to you.

When opposed to Infantry, endeavour to meet an opponent on your Right; as every Guard parries the point of a sword, so will each defend against the point of a bayonet, taking care that the "Fort" of your own weapon meets the "Feeble" of your opponent's; consequently it is the bayonet which must be struck.

In advancing against Infantry, the Third Guard on the Right or Fourth Guard on the left leads well to the attack, and is ready for defence, or to take advantage of any opening; and should your opponent appear irresolute, or draw back his weapon, then, while passing, the Cut Three, or Point, may be given to advantage; the Cuts Three and Four on the Right or Left, form a defence, as well as an attack, upon Infantry; and the smarter they are given, the more effectually they will protect you, and cripple your opponent's position. The Point should be used chiefly in pursuit, and will be given with most advantage on your Right, as from thence you can reach further, and are better prepared for defence.

In the use of the sword at speed, there are few things of more importance than that the Horseman should aid the impetus of the Cut, and secure his own seat by supporting the sway of the body with the opposite leg to that side on which he intends to Cut or Point; for instance, if he desires to cut Three or Four on the near side of the horse, he should support the body by a strong pressure of the inside of the right thigh and leg against the saddle; *vice versâ* in Cuts made to the right, he should support the body with the left leg; the lower down the grip can be taken the better, taking care not to touch the horse with the spur at the time of making them. This rule is of greater consequence than it appears to be at first sight; for unless it is understood and practised, a person may be a very good swordsman, and yet not capable of using his weapon either with effect against an opponent or with safety to himself. It is particularly applicable and necessary in pursuit over rough and varied

ground; and the same observation applies to the use of the Lance.

The instructors should endeavour, as much as possible, in their progressive instructions to the volunteer, to impress upon his mind such occasional observations as become most applicable. Opportunities of thus explaining may often be taken during pauses of rest, as no Squad should be kept too long either in the positions or movements; and where any volunteers are more deficient than the rest, the whole should be made to cease for the moment, and only those who have gone wrong be required to go on and correct their error.

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3. Officers' Salute.

On the March, or when manœuvring on horseback, the sword is to be at the slope.

In all Parade movements and on complimentry occasions, mounted, the sword is to be carried with the hilt resting upon the right thigh, the blade perpendicular, the grasp of the lower fingers slightly relaxed.

The Salute on the March is to commence when at ten paces from the Reviewing Officer. The sword is then raised, by extending the arm to the right, and by a circular motion brought to the Recover; and continuing the motion to the right shoulder, from whence the sword is lowered (to the full extent of the arm) to the right, with the edge to the left, and point in the direction of the right foot, the arms close to the body. The time for completing the Salute if taught on Foot is four paces, of slow time of 75 paces in a minute, commencing with the left foot, and may be divided (for Drill practice) as follows:—First Pace, the sword raised to the right; Second Pace, to the Recover; Third Pace to the Right shoulder; Fourth Pace, the sword lowered to the right. The same time is given for the Salute when mounted, but the sword should then be kept in a line with the knee. On the March, the above four motions are slowly combined into one graceful movement.

The head should be slightly turned towards the Reviewing Officer, whilst passing him, and having done so six paces, "Recover Swords," at one pace, and "Carry" in the following.

PLATE XXIII.

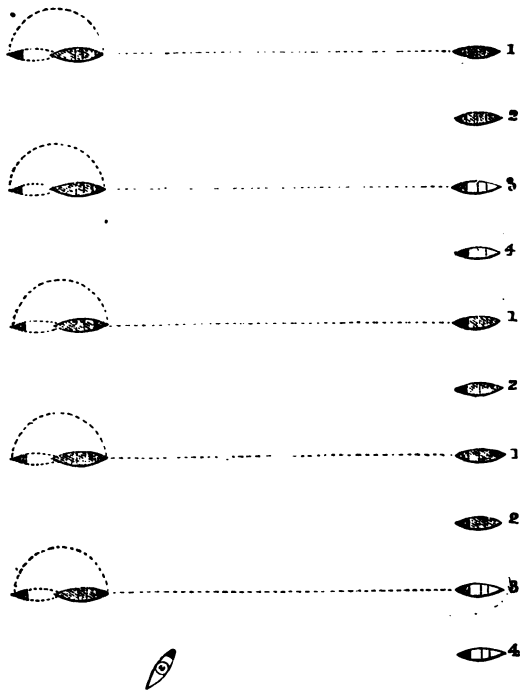
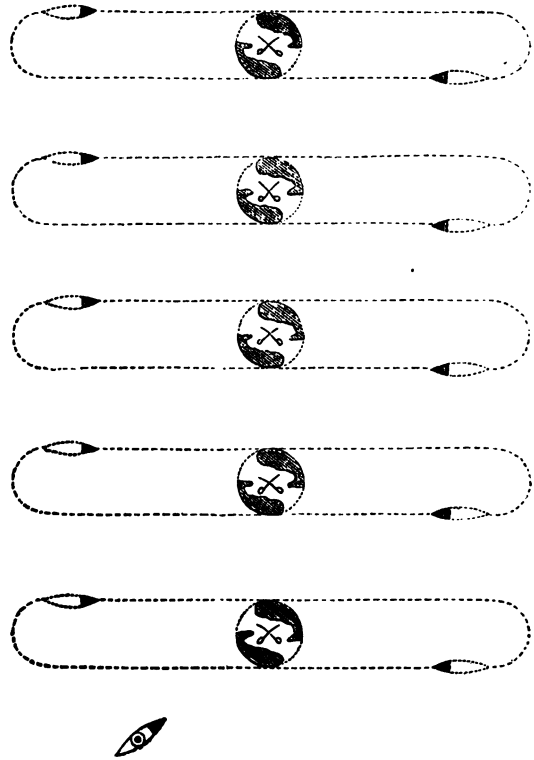


PLATE XXIV.



Attack and Defend.

A squad of 10 or 12 being formed in line at intervals of four yards, the instructor will explain that the object of the following practice is to accustom both men and horses to the use of the sword in attack and defence

RIGHT FILES, ADVANCE, WALK, MARCH. — The right files move out together, dressing by the right, and taking care to preserve their proper intervals, which will now be eight yards.

RIGHT FILES ABOUT, HALT. — The right files having advanced 24 yards will at the word ABOUT make a right about turn, and now dressing by the left, will halt at the word HALT.

The right and left files will now be opposed to each other, right hand to right hand. *See* Plate XXIII.

RIGHT FILES, ATTACK, LEFT FILES DEFEND, CIRCLE RIGHT, WALK, MARCH. — The right and left files will advance with the "right front guard," circle round each other, and when within reach the right files deliver cuts one and two at the opponent's face, which the left files defend by the first and second guards.

After they have circled round each other they retire with the right rear guard and resume their places. *See* Plate XXIV.

In like manner the left files may attack and the right files defend.

RIGHT FILES, ATTACK, LEFT FILES DEFEND, CIRCLE LEFT, WALK, MARCH. — By a right incline the right and left files will advance, and with the "left front guard," will meet left hand to left hand, circle round each other, and when within reach the attacking files will cut one, two of left engage, which the opponents will defend by guards first and second of "left defend."

After they have circled round each other, they retire with left rear guard and resume their places.

RE-FORM RANK ENTIRE— WALK, MARCH. — When the practice is over the right files, at the word MARCH, move back into their original places in the line.

Independent Practice.

The use of masks and basket sticks may be allowed, and will be found a very useful exercise, provided proper care is taken not to strike or frighten the horses.

Any two opposing files may be ordered to advance at a canter, circle entire, and engage loose, taking their own mode of attack and defence until ordered to retire, at which command they will retire with the right, or left, rear guard to their respective places.

PART X.

SECTION I.

Inspection or Review.

Mark out with flags a space of about 150 yards square (Plate XXV.); form in line on the base or parade line.

As the inspecting officer approaches (swords having been drawn, and at the slope), the commanding officer will give the word TAKE ORDER—MARCH, when the officers will advance, and the supernumerary rank rein back to their proper distances of order, the trumpeter taking his place of one horse's length on the right of the line. Plate VIII. fig. 2.

As the inspecting officer presents himself in front of the centre the commanding officer will give the word CARRY SWORDS; the officers will then salute, taking the time from the commanding officer; and where there is no music, on the inspecting officer acknowledging the salute the officers will "recover swords," taking the time from the commanding officer.*

The inspecting officer will then go to the right of the line, accompanied by the commanding officer, and after passing down the front and up the rear for the purpose of inspection, he will take his place in front of the flag, between the points B, C.

The commanding officer will next give the word TAKE CLOSE ORDER–MARCH. Plate VIII. fig. 1.

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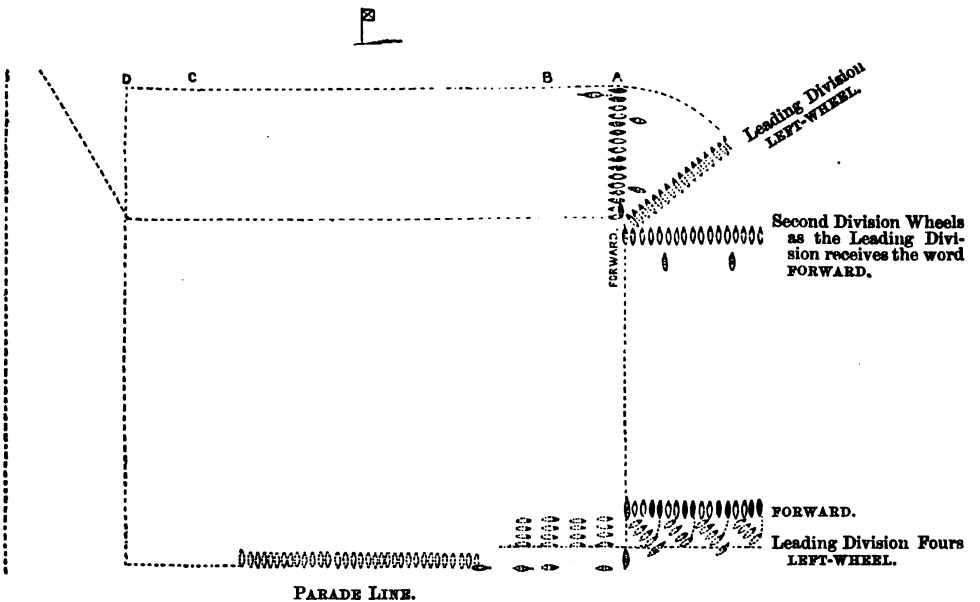
* Serjeants, when in command of divisions, do not salute, but "carry swords."

PLATE XXV.


D
C
B
A
Leading Division
LEFT-WHEEL.
FORWARD.
Second Division Wheels as the Leading Division receives the word FORWARD.
FORWARD.
Leading Division Fours
LEFT-WHEEL.
PARADE LINE.

He will then give the caution, "March Past in Squadron," "Column of Troops," or "Column of Divisions," according to strength, or as may be required by the inspecting officer.

The usual way for a single troop of not more than 32 files in the rank is to march past in open column of divisions not exceeding 16 files in each, and is done by taking ground to the right by fours; and on the last four of each division coming opposite point A, the officer of that division will give the word FOURS LEFT WHEEL—FORWARD, taking his place at the same time on the pivot flank. Each division will in like manner wheel up in succession into column.

On arriving within wheeling distance of point A, the officer of the leading division will give the word LEFT WHEEL, advancing himself to within about one horse's length of point A, when he will make a left turn, and as his division completes its wheel he will give the words FORWARD —BY THE RIGHT, and find himself in his proper place in front of the second file from the right, and will proceed down the passing line until he arrives at point B, which ought to be about 50 yards from the saluting flag, when he, and in like manner the officer of each division in succession, will give the words TAKE ORDER—CARRY SWORDS.

On arriving within 10 yards of the inspecting officer the commanding officer will salute. The officer of the leading division will do the same, and so will the officers of the following divisions in succession as they come to the prescribed distance of 10 yards.

In marching past the trumpeter's place is in the supernumerary rank in rear of the second file on the left of the leading division. After passing the inspecting officer 10 yards the officers will recover swords, and on approaching point D each officer will incline to the left, so as to place himself on the left or proper pivot flank of his division, and when its right arrives at point D will give the word LEFT WHEEL, and on his division completing the quarter circle he will give the word FORWARD—BY THE LEFT. The column will then trot past in divisions or in sections of fours, or canter past in fours, or rank past in single files, as may be required. In the latter case each division will rank off by single files from its right, headed by its officers, and with "carried swords."

The Manual and Platoon Exercises.

The troop having resumed its original position in line will return swords. The right (or left) files will then be ordered to dismount, and will be put through the manual and platoon exercises by one of the subaltern officers.

Sword Exercise.

A convenient way of putting a troop through the sword exercise is to give the word FROM THE RIGHT OF FOURS—FRONT FILE MARCH.

Having been put through the sword exercise and pursuing practice by one of the subaltern officers, the word, ON THE LEADING FILES FRONT FORM—MARCH, will replace the troop in line.

Or, if inconvenient to form line so far in advance of the parade line, the caution RETIRE and the command FILES ABOUT—MARCH, followed by ON THE LEADING FILES OF FOURS—LEFT ABOUT FORM, will answer the purpose.

SECTION 2.

Formation for Attack as Cavalry.

Although the rifle is the principal weapon of volunteers who are trained on the system laid down in this manual, they may be called upon to attack with the sword as cavalry. It is therefore necessary to understand—

1st. That the formation of a body of cavalry for an attack depends much on the description and dispositions of the enemy, and also upon the nature of the ground, which should be reconnoitred.

2nd. The attacking force should be formed in three distinct bodies, distinguished as "first line," "support," and "reserve."

The "first line" should seldom consist of more than one-third of the whole force; it should be formed in line.

The supports may be either in line or in double open columns from the centres of regiments.

The reserve should be in similar columns or in regimental close columns.

3rd. The ordinary distance from the "first line" to the "support," as well as from the "support" to the "reserve," must be 400 yards, that distance being considered sufficient to preserve the support from being disordered should the "first line" be forced to retreat.

4th. The "support" and "reserve" must steadily follow the advance of the "first line," maintaining their respective distances; but the moment the "first line" is seen commencing its charge they must both draw up to a walk, and continue at that pace till the evident success of the "first line" warrants their more rapid advance, or till (in the event of its failure) it has retired and cleared the front, so as to enable the "support" to attack with full effect, and probably convert the failure of the "first line" into a success. The officers of the "first line" should for this reason use every exertion to get their men away round the flanks, and rally them behind the "reserve," and on no account to fall back upon the "supports," which would create disorder.

5th. When the enemy's force is ascertained to consist of infantry and guns without cavalry, the distance of the "support" from the "first line" may be lessened, and in some cases of this sort the "reserves" may be dispensed with; but if the enemy have thrown themselves into squares the fire of artillery should be brought to bear upon them before the attack is made.

The Charge.

The charge is that attack, made with the greatest velocity and regularity possible, to breaking the order of the opposing force.

When the line is to charge the words of command are, MARCH, TROT, GALLOP, CHARGE, WALK, and HALT.

The commanding officer should lead at such a pace as the flanks can keep up with. The flanks should not press ahead of the centre. Every alteration of pace must be made gradually and at the same time by the whole line.

The pace may increase to a gallop when within 250 yards of the enemy, and when within 40 or 50 yards the word CHARGE will be given, and the attack delivered with greatest possible speed consistent with order.

Any closing in or crowding at the instant of the charge must impede the horses and impair the effect, and must therefore be avoided.

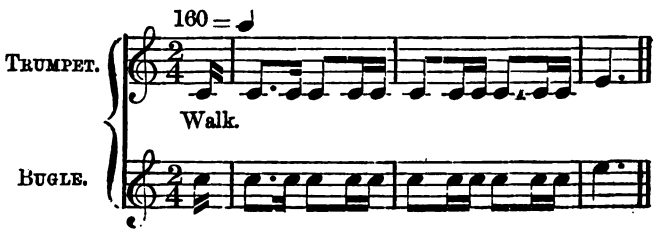
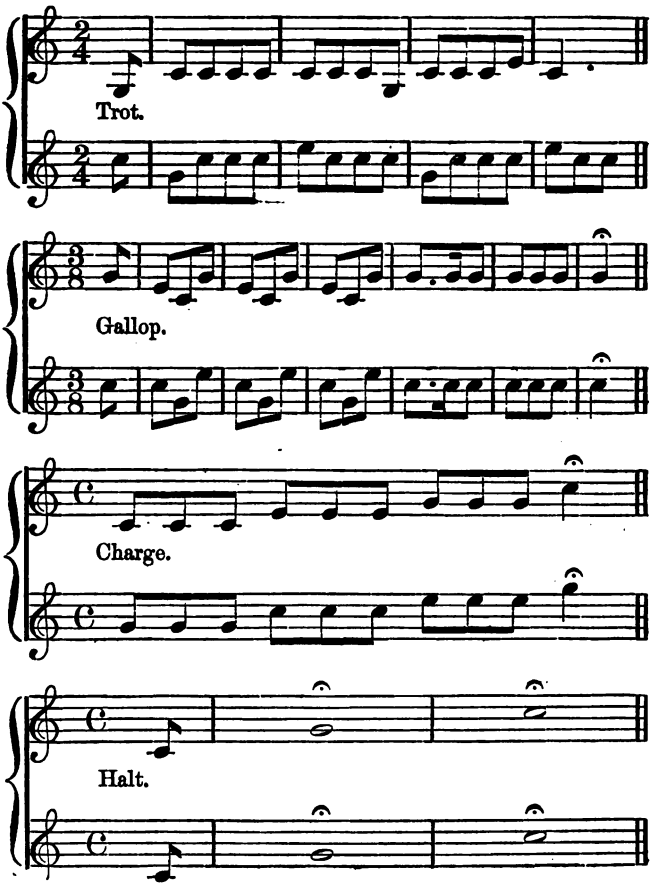
It is from the uniform velocity of the line that the greatest effect is produced, and much must be left to the discretion and judgment of the commanding officer, so as to deliver the attack in such a manner as shall not blow or distress the horses.

In every part of the charge the centre of each squadron (or troop) must be very exact in following the officer or leader, the rest of the men dressing to the centre, without crowding in or opening out, and taking care that the flanks do not get too forward.

When the enemy has been broken the flank troops of a regiment, or the flank squadrons of a brigade, may be ordered to pursue and follow up the advantage, opening out and covering the front at intervals. Irregular cavalry ordered to pursue open out by files from the right of *Fours*, and when the pursuit is to be discontinued the word FRONT FORM will bring them back into close order, the centre of the troop or squadron being the point of re-formation.

Cavalry should never stand still to receive an attack, but should, be the ground what it may, keep moving to meet the shock.

In the advance for attack the sword is "carried;" in the charge it is brought to the "engage;" and on the order to walk it is "sloped."

CAVALRY FIELD SOUNDS FOR TRUMPET AND BUGLE.

Trot.
Gallop.
Charge.
Halt.

APPENDIX.

The weight of accoutrements, arms, and average of men in the corps under the compiler's command.

	lbs.	oz.	lbs.	oz.
Sword - - -	3	3		
Belts, with 2 pouches, to contain 70 rounds ball cartridge - -	3	5		
Short Enfield rifle - - -	8	8		
Bucket - - - -	1	10		
Cloak - -	7	14		
Rug - - - -	6	0		
Saddle - - -	15	0		
Bridle, &c. - - -	3	12		
			49	4
70 rounds ball cartridge - -		-	6	4
Saddle bags and kit - - -		-	20	0
Average weight of men - -		-	168	0
			243	8

About 17½ stone in marching order, with 70 rounds of ball cartridge.

About 16 stone in parade order, with 70 rounds of ball cartridge.

Average height of men, 5 feet 10 inches.

Duties in Camp.

Extract from Queen's Regulations for 1859.

Para. 38, p. 315. The duties of out-posts are so various that they will usually require detailed instructions, according to circumstances; the following directions will, however, apply generally, and are most strictly to be observed.

Para. 40. Guards are not to molest any persons coming to camp with provisions, and are on no account to exact or receive anything for their free passage.

Para. 41. Persons bearing a flag of truce from the enemy are to be treated with attention and civility; but as communications of that nature are frequently designed for the purpose of gaining intelligence, and of reconnoitring the army and its out-posts, the most strict and efficacious means are to be adopted to frustrate such intentions.

Para. 42. When a deserter comes in from the enemy, he is immediately to be sent under proper escort to the officer commanding the out-posts, who, after ascertaining whether he brings any intelligence immediately relating to his own post, is to forward him to head-quarters.

Para. 43. The videttes or sentinels, on out-posts, are to be placed so that they can best observe the approach of the enemy, and communicate by signal to their respective posts, as well as to each other; at night or in thick weather they are to be double.

Para. 44. Officers, soldiers, and followers of the camp are not on any account to be suffered to pass the out-posts, unless they are on duty, or present a regular permit from head-quarters.

Para. 45. The men on advanced piquets are to carry their provisions with them, ready cooked, when circumstances will permit. The cavalry to carry sufficient forage for the time they are to be out.

Para. 46, p. 316. It is the duty of officers on all piquets to inspect all reliefs of sentries, both when they go on and come off their posts; to call the rolls frequently, and by every means in their power to keep the men under their command in the most perfect state of vigilance and preparation.

Para. 50. As soon as an officer commanding an out-post or advanced piquet (whether of cavalry or infantry) arrives on his ground, he is to endeavour to make himself master of

his situation, by carefully examining not only the space he actually occupies, but the heights within rifle shot, the roads and paths leading to or near the post, ascertaining their breadth and practicability for cavalry and cannon; to ensure a ready and constant communication with the adjoining posts and videttes,—in the day by signals, in the night by patrols. He is to examine the hollow ways that cover the approach of an enemy, and consider all the points from which he is most likely to be attacked. He will by these means be enabled to take measures to prevent surprise; and should he be attacked during the night, from the previous knowledge he has obtained of the ground, he will at once form a just estimate of the nature of the attack, and make his arrangements for defence with promptitude and decision.

Advance Guards, Rear Guards, and Patrols. *See* Cavalry Regulations of 1859, Section XV., page 242.

Piquets. *See* ditto, Section XVI., page 243.

Flags of Truce. *See* ditto, Section XVII., page 246.

Foraging. *See* ditto, Section XVIII., page 247.

Alarm Posts. *See* ditto, Section XIX., page 247.

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